



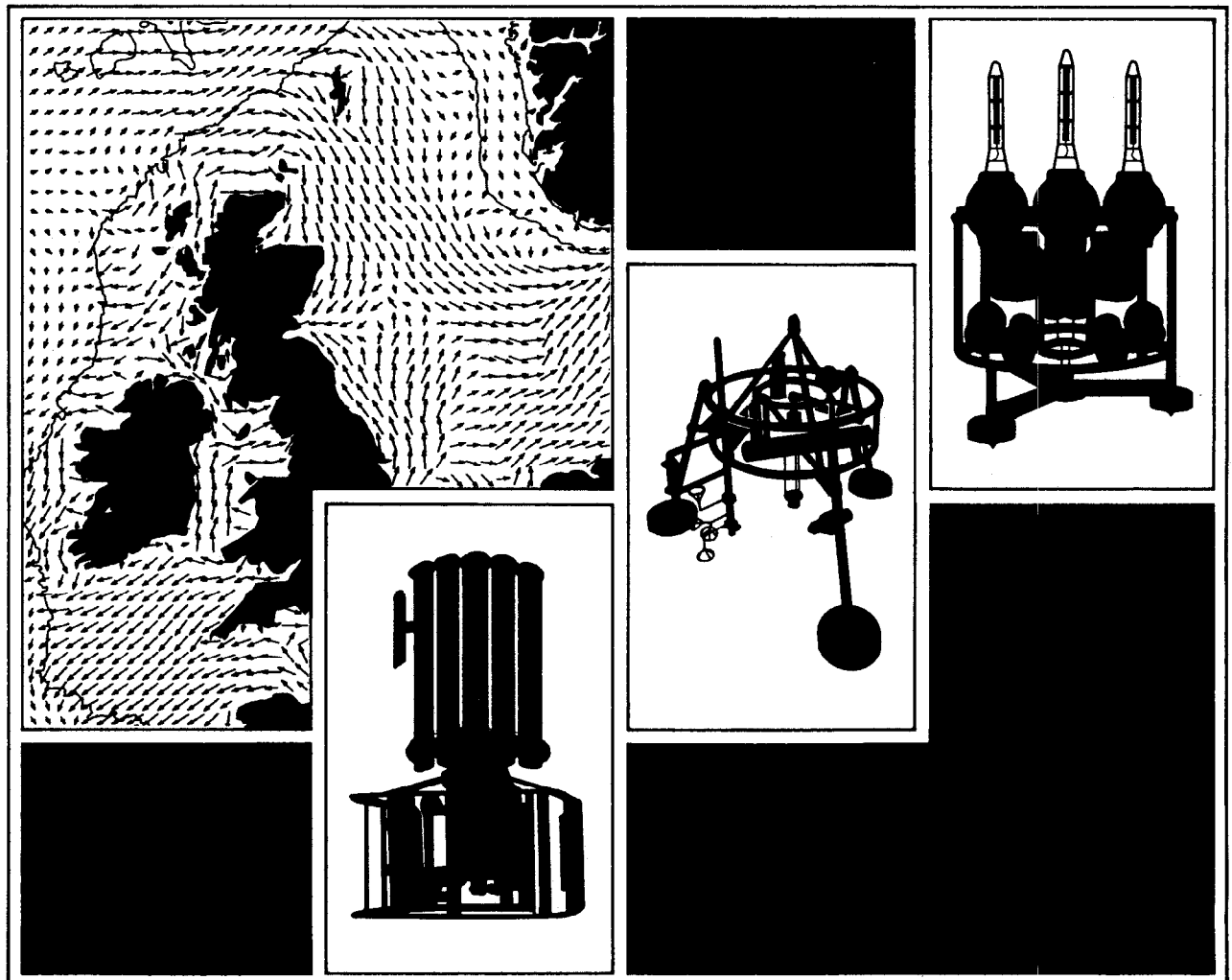
**Proudman
Oceanographic
Laboratory**

Current meter records Site B 55° 30'N 05° 31'E

August 1988 – September 1989 North Sea Project

PJ Knight J Falconer and MJ Howarth

Report No 13 1990



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ABSTRACT <p>This report describes results from a current meter rig positioned at site B during the North Sea Project. Site B was one of six current meter sites used throughout the survey part of the experiment. Standard plots are shown as well as statistical output from the calibrated current meter records.</p>		
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Meter No 1261	78
Meter No 1264	84
Meter No 9069	90
Rig No C53BC	98
Meter No 1118	99
Meter No 1112	105
Meter No 1113	111
Meter No 9069	117
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Meter No 1264	126
Meter No 1119	132
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1 INTRODUCTION

Fifteen months of data were gathered in the southern North Sea as part of the North Sea Project, a NERC Community Research Project. Each month the RRS Challenger ship time was split between a two week survey and a two week process cruise.

This report describes the results from a current meter mooring at 55° 30'N 05° 31'E deployed during the survey cruises. The mooring was first deployed on survey cruise Challenger C33/88 and subsequently re-deployed during follow up cruises between August 1988 and September 1989.

Figure 1 shows the position of the mooring, site B, and its relative position to other sites in the North Sea. It was one of six current meter moorings deployed during the North Sea Survey, and was situated in a region of weak tidal currents, up to a maximum of 0.5 m s^{-1} , and in 52m depth of water. These two factors produced stratified conditions during the summer.

The mooring, Figure 2, contained four current meters, InterOcean S4 current meter's at 37m, 27m and 15m from the bottom, and an Aanderaa RCM 7 current meter at 7m from the bottom. The S4's, electromagnetic current meter's, measured vector averaged North and East components of current velocity. The RCM 7, a rotor/paddle current meter, sampled the current every 1/50th of the recording interval and parameters every recording interval. It was primarily used to measure conductivity, pressure and temperature, although averaged current speed and direction were also recorded. The pressure sensor, not of tide gauge quality, was used as an indication of mooring stability.

After calibration statistics were calculated from the data and a low pass filter was applied to produce six hourly values which were also statistically analysed. Finally standard current meter plots were produced in order to check data quality and aid in interpretation of the data.

The data return from these deployments was above average, although one mooring was lost completely and other moorings suffered damage. Also, some of the RCM 7's did not perform well when measuring parameters. The mooring was not deployed on cruises C37/89, C41/88, C43/89 and C45/89 due to not visiting the site, C47/89 due to problems with the S4's lithium batteries and C49/89 because of bad weather. The current meters on the mooring returned 77% good data when deployed, although the percentage reduces to 46% when non-deployed meters are included.

2 SUMMARY OF DEPLOYMENTS

The following information gives an overview of the data processed at site B during the North Sea project.

Mooring	Meter No	Deployment	Recovery	Meter Ht(m)	Data length	Comments
C33BC	1112	11-AUG-88	09-SEP-88	37	1.3 days	Short by 28.3 days
C33BC	1113	11-AUG-88	09-SEP-88	27	1.3 days	Short by 28.3 days
C33BC	1114	11-AUG-88	09-SEP-88	15	1.3 days	Short by 28.3 days
C33BC	9347	11-AUG-88	09-SEP-88	7	0.0 days	Aanderaa damaged
C35BC	1120	10-SEP-88	07-NOV-88	37	58.4 days	Good data set
C35BC	1119	10-SEP-88	07-NOV-88	27	58.4 days	Good data set
C35BC	1118	10-SEP-88	07-NOV-88	15	58.4 days	Good data set
C35BC	9069	10-SEP-88	07-NOV-88	7	58.4 days 41.0 days	N/E Short by 17.4 days T/S/P Spikes in parameters
C39BC	1120	07-NOV-88	-----	37	0.0 days	Lost
C39BC	1114	07-NOV-88	-----	27	0.0 days	Lost
C39BC	1121	07-NOV-88	-----	15	0.0 days	Lost
C39BC	9348	07-NOV-88	-----	7	0.0 days	Lost
C51BC	1265	03-MAY-89	01-JUN-89	37	28.7 days	Good data set
C51BC	1261	03-MAY-89	01-JUN-89	27	28.7 days	Good data set
C51BC	1264	03-MAY-89	01-JUN-89	15	28.7 days	Good data set
C51BC	9069	03-MAY-89	01-JUN-89	7	28.7 days	Spikes in parameter data
C53BC	1118	01-JUN-89	30-JUN-89	37	28.7 days	Good data set
C53BC	1112	01-JUN-89	30-JUN-89	27	28.7 days	Good data set
C53BC	1113	01-JUN-89	30-JUN-89	15	28.7 days	Good data set
C53BC	9069	01-JUN-89	30-JUN-89	7	28.7 days	Spikes in parameter data

Mooring	Meter No	Deployment	Recovery	Meter Ht(m)	Data length	Comments
C55BC	1264	30-JUN-89	30-JUL-89	37	30.2 days	Good data set
C55BC	1119	30-JUN-89	30-JUL-89	27	30.2 days	Good data set
C55BC	1113	30-JUN-89	30-JUL-89	15	30.1 days	Good data set
C55BC	9419	30-JUN-89	30-JUL-89	7	30.2 days	Spikes in SPD/DIR data
C57BC	1264	30-JUL-89	29-AUG-89	37	29.9 days	Good data set
C57BC	1119	30-JUL-89	29-AUG-89	27	29.9 days	Good data set
C57BC	1113	30-JUL-89	29-AUG-89	15	29.9 days	Good data set
C57BC	9069	30-JUL-89	29-AUG-89	7	29.9 days	Spikes in parameter data
C59BC	1264	29-AUG-89	28-SEP-89	37	29.5 days	Good data set
C59BC	1113	29-AUG-89	28-SEP-89	27	29.5 days	Good data set
C59BC	1118	29-AUG-89	28-SEP-89	15	29.5 days	Good data set
C59BC	9347	29-AUG-89	28-SEP-89	7	29.5 days	Good data set

3 RIG SYSTEM DESCRIPTION

The mooring was deployed in a water depth of 52m at latitude of 55° 30'N and longitude 05° 31'E. It consisted of four current meters at 7m, 15m, 27m and 37m above the sea bed. Figure 2 shows a schematic diagram of the mooring which is a standard 'U' shape

4 CURRENT METER SPECIFICATIONS

The top three meter's used were InterOcean System Model S4's and the bottom meter was a RCM 7 Aanderaa. The primary reason for deploying the Aanderaa was to measure parameters such as conductivity, temperature and pressure. The RCM 7 also measured speed and direction, but this type of meter does not perform well in the wave zone and its velocity should be treated with circumspection.

4.1 S4 current meter

The InterOcean Systems Model S4 electromagnetic current meter is a self contained 0.25 diameter sphere, with no protruding sensors. It measures current by creating a magnetic field and sensing the voltage induced in two orthogonal directions, by the movement of the sea water, an electrical conductor, through the field. This information is combined with the instrument orientation, sensed by a Flux-Gate compass, and the North and East components computed. The S4's at this site were used in vector average mode throughout the survey. They sampled every $\frac{1}{2}$ a second and averaged the vectors over a 10 minute recording interval.

4.2 S4 specification

Speed	Range	0 to 350 cm s ⁻¹
	Accuracy	±2 cm s ⁻¹
Direction	Range	0 to 360°
	Accuracy	±2°

4.3 RCM 7 current meter

The Aanderaa RCM 7 current meter is a self-recording current meter. Temperature is measured by a thermistor fitted into a stud extending into the water. Conductivity is measured by an electrodeless induction conductivity cell and pressure is measured by a sensor consisting of a potentiometer driven by a Bourdon tube. A vane is attached to the meter in order to align the compass with current flow and keep the meter in an upright position. The velocity of the current is measured with a half shrouded paddle wheel situated on top of the meter. During the selected recording interval of 10 minutes the number of rotor revolutions and the direction of the compass are sampled every 12 seconds and broken up into North-South and East-West components. When the 10 minute recording interval has elapsed, the resultant average vector and its angle is calculated and recorded.

4.4 RCM 7 specification

Speed	Range	2 to 250 cm s ⁻¹
	Accuracy	±2 cm s ⁻¹
Direction	Range	0 to 360°
	Accuracy	±5°
Temperature	Range	-2.46 to 21.4°C
	Accuracy	±0.05°C
Conductivity	Range	21 to 51 mmho cm ⁻¹
	Accuracy	±0.025 mmho cm ⁻¹
Pressure	Range	0 to 100 PSI or 0 to 200 PSI
	Accuracy	±1%

5 DATA PROCESSING STEPS

Data from the different meters were handled in similar ways. The S4 and RCM 7 data were transferred from the recovered meter directly to an IBM PS/2 on board RRS Challenger and then loaded onto a 3.5 inch floppy disk which was brought back to the Proudman Oceanographic Laboratory. Both types of data were then transferred again, to the IBM 4381 mainframe via a 3270 terminal emulator on the IBM PS/2.

Two software systems, CALT and CALP, were developed at POL for quick and efficient processing and display of times series data, such as current meter data. The CALT system calibrates and checks for errors and the CALP system produces standard graphical output, filtered and non-filtered statistical analyses.

Before calibrating the data, all the information required for processing were input into an ORACLE data base. All the information can be accessed easily with FORTRAN programs.

Processing was then initiated by CALTUX, which calls a suite of FORTRAN programs for error checking and producing calibrated data. Any errors found from the initial run were edited out of the raw data and CALTUX run again.

After successful completion of the CALTUX stage another suite of FORTRAN programs initiated by CALPTX were used to produce standard current meter graphical output, low pass filtered output and statistics for non-filtered and filtered data. The types of plot obtained, details of filtering and statistics are explained in more detail in the following sections.

6 DETAILS OF STATISTICS AND FILTERING

6.1 Simple statistics

A simple statistical analysis was carried out on each calibrated data set. The following statistics were calculated :-

- (1) Mean, variance and standard deviation of the East and North components of velocity.
- (2) The mean vector speed and direction were calculated from the above statistics.
- (3) The maximum ten and minimum ten Northings and Eastings and the top speeds.

6.2 Variance ellipse statistics

Statistical analysis was also carried out on the ellipse which can be graphically represented by a scatter plot. The following statistics were calculated :-

- (1) The maximum and minimum variances and their ratio (minimum/maximum). If the ratio is near to one the currents have no preferred direction, whilst if it is near to zero the flow is rectilinear.
- (2) The direction associated with the maximum and minimum variance, in the range of -180° to $+180^\circ$.
- (3) The total variance which equals the sum of the North and East component variances or the sum of the maximum and minimum variances.
- (4) The average direction for each half of the ellipse, related to the directions of maximum variance. If these directions differ by 180° the scatter plot is symmetrical.

6.3 Filtering

The ten minute calibrated data were also low pass filtered, see Figure 3 which shows the filters response function, and sub-sampled every 6 hours. Three days of data are lost at the beginning and the end of the record. The statistical analysis was repeated on the filtered data set.

7 FORMAT OF DATA OUTPUT

All speeds and velocities are in m/s, directions in degrees true and time in GMT. The results are ordered by mooring number (See page 8). Each mooring result is made up of mooring information, meter information, graphical output, statistics (unfiltered and filtered) and additional graphical output with the S4's first followed by the RCM 7.

7.1 Mooring information

Position latitude	: Latitude of deployment
Position longitude	: Longitude of deployment
Water depth(m)	: Depth measured from ship's echo sounder
Deployed on cruise	: Cruise identifier
Recovered on cruise	: Cruise identifier
Site name identification	: Additional site identifier
Magnetic deviation	: Taken from charts
Rig deployed on	: Time surface buoy released
Rig recovered on	: Time release fired on rig
Period of deployment	: Total time of deployment
Comments	: Details regarding mooring

7.2 Meter information

Rig number	: Unique POL mooring/rig reference
Meter number	: Four digit current meter number
Sample interval	: Sampling interval in seconds
Meter height from bottom	: Height in metres
Position of meter on rig	: T for top B for bottom M for middle
Meter type	: S4 for InterOcean AS for Aanderaa RCM 7
Meter started	: Date and time
Meter stopped	: Date and time
Time of last valid scan	: Used when good data ends before switch off
Period in days on record	: Total time meter switched on
Total number of scans	: Used to check timing
Timing error	: Error in seconds
Comments	: Details regarding meter

7.3 Graphical output

- (1) North and East components of velocity against time. The semi-diurnal nature of the tides can be seen as well as the Spring/Neap cycle in both components of velocity.
- (2) Histograms of speed and direction. Indicates the spread of speeds and directions throughout the deployment period.
- (3) Scatter diagram of North component of velocity against the East component. Shows the direction and magnitudes of the currents. This plot is often a good check on the quality of the data, in particular regarding direction and possible problems at low speeds.
- (4) Eulerian progressive vector plot. The nature of the residual flow is emphasised, although the semi-diurnal tides are also apparent.
- (5) Temperature, salinity and pressure against time (only for RCM 7's). Salinity is calculated from temperature, conductivity and pressure.

7.4 Statistics of unfiltered and filtered data

This is followed by simple statistics of the calibrated data and filtered data. The filtered statistics page is indicated by the letter 'F' at the end of the file type printed at the top of the page. The section is finished with the following plot using the filtered data.

7.5 Additional graphical output

- (6) Stacked filtered stick plot. The filtered data can be displayed in a stick type way in order to see the change of the residual flow with time and through the vertical.

ACKNOWLEDGEMENTS

The authors would like to thank RVS Barry and POL engineers for setting up, deploying and recovering the instruments. The survey on such a large scale and with quick turn around of equipment needed would not have yielded such excellent returns without their effort and it is to their credit. We would also like to thank Steve Loch of BODC for undertaking the initial design and implementation of the CALTUX software.

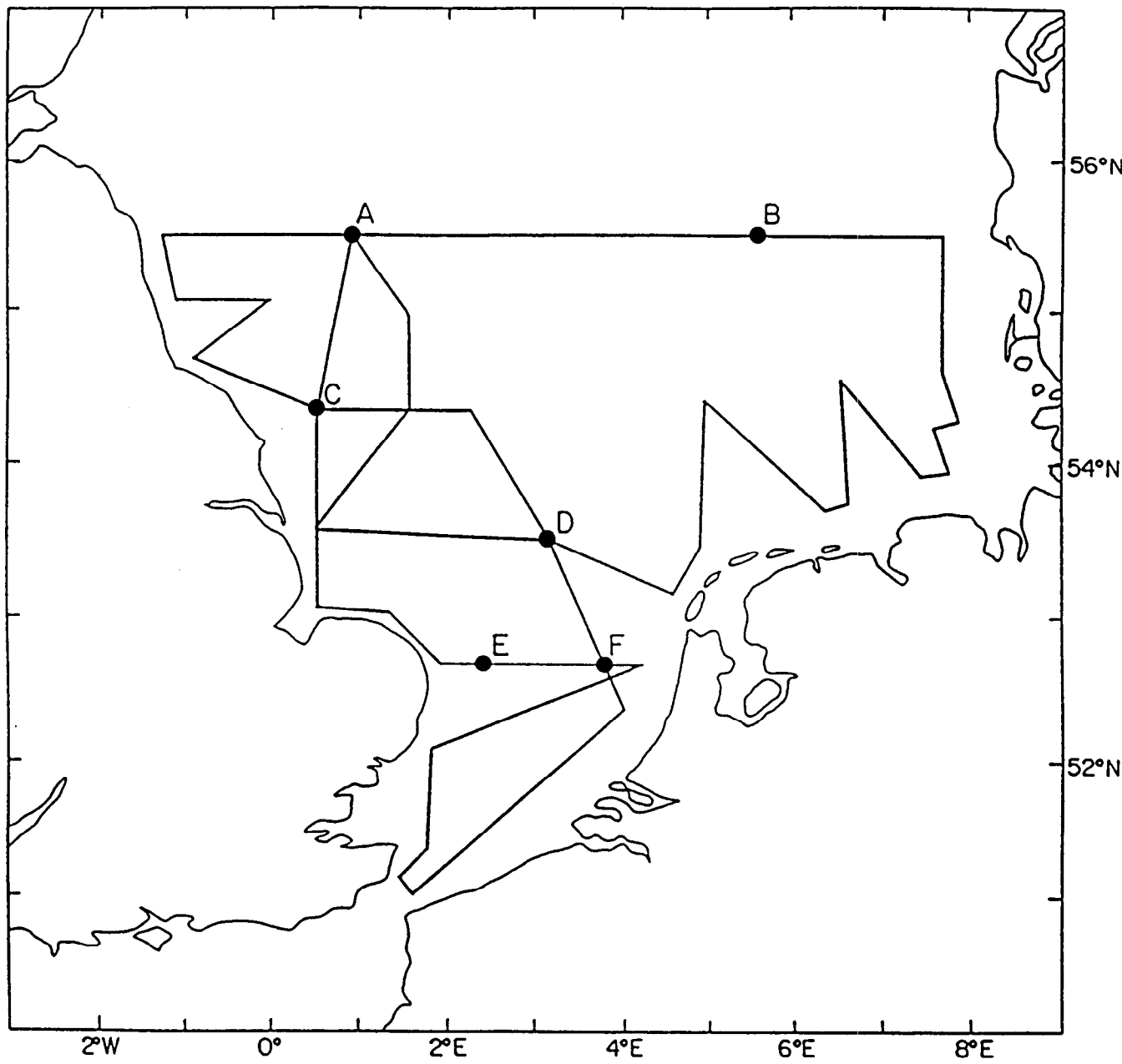


FIGURE 1 Positions of North Sea Project current meter rigs.

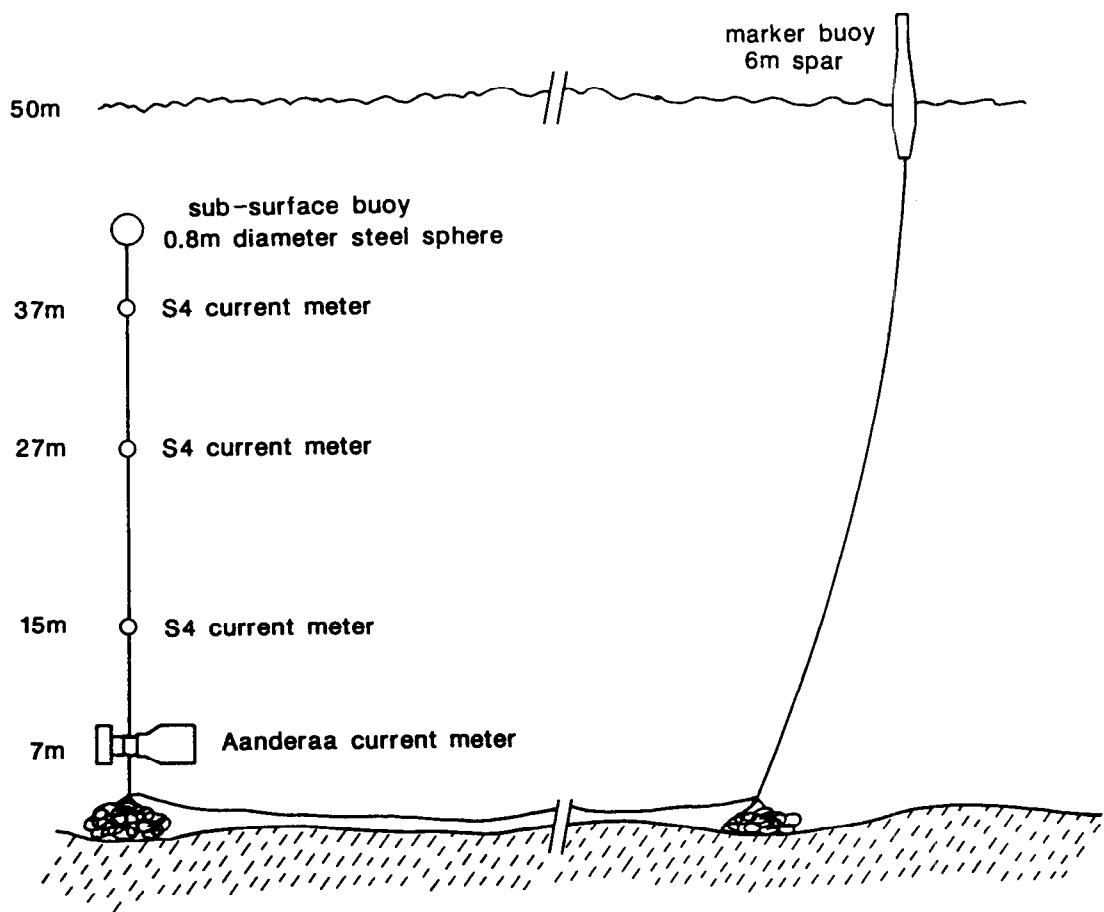


FIGURE 2 Mooring system schematic description.

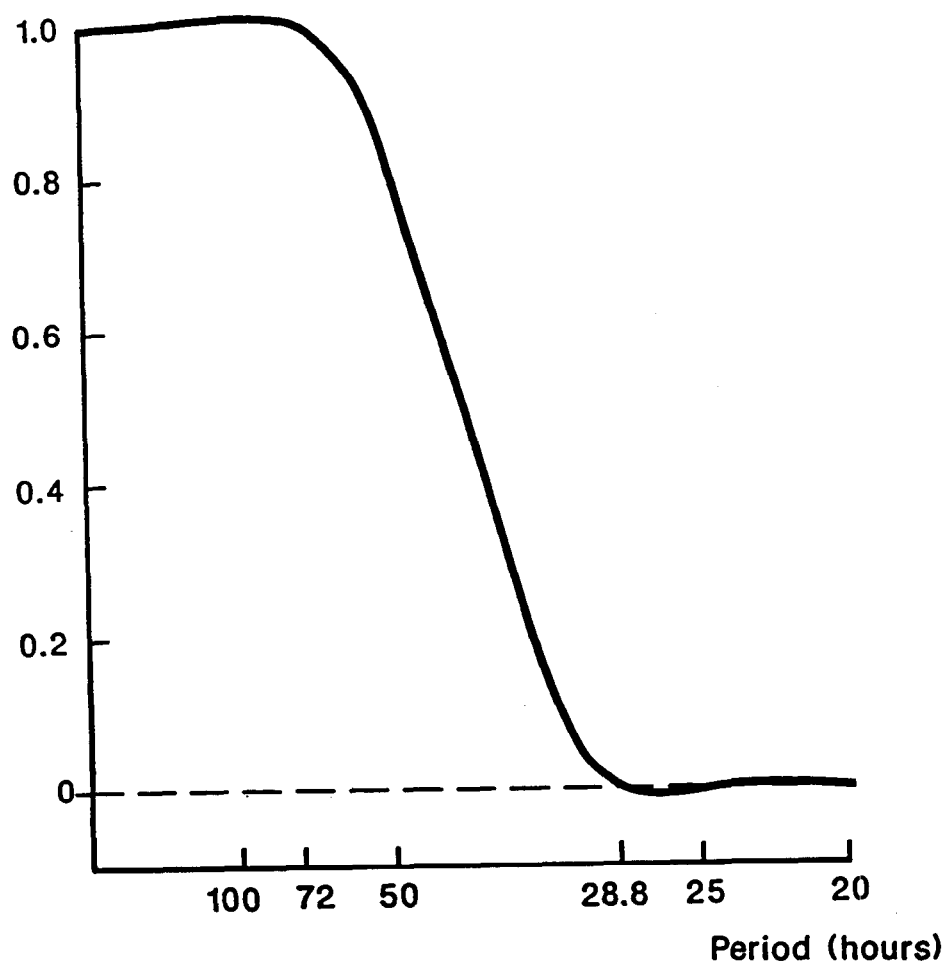


FIGURE 3 Response to low pass filter.

Rig information details for C33BC

Position Latitude	:	55 29.96N
Position Longitude	:	05 30.74E
Water depth	:	52.0 m
Deployed on cruise	:	C33
Recovered on cruise	:	C35
Site name identification	:	B
Magnetic deviation	:	2.8 degrees west
Rig deployed on	:	11-AUG-88 06:09:00
Rig recovered on	:	09-SEPT-88 21:25:00
Period of deployment	:	29.6 days
Comments	:	Damage to mooring noted on recovery

Meter information details for 1112

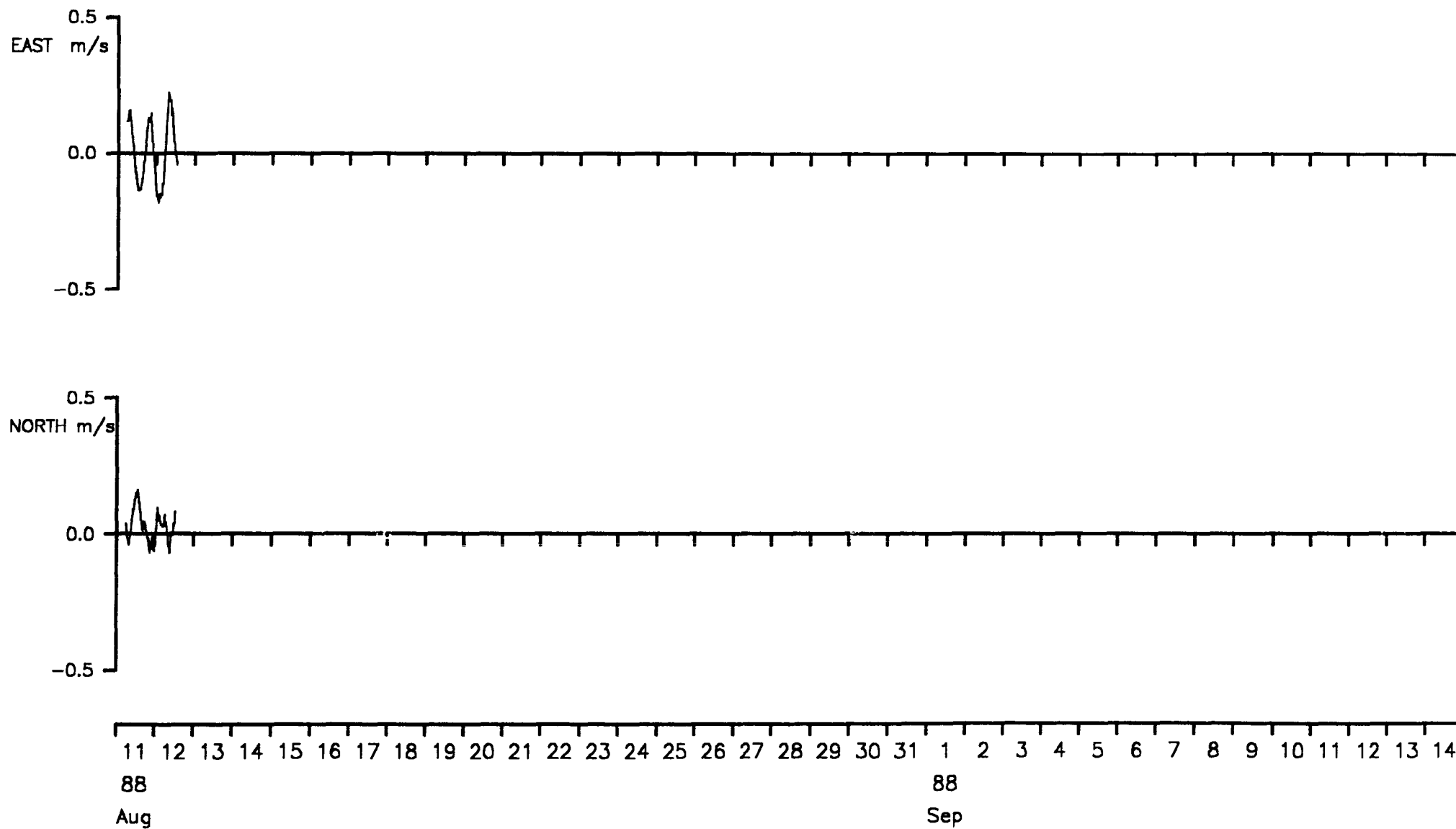
Rig No	:	C33BC
Meter No	:	1112
Recording interval	:	600.0 seconds
Meter height from bottom	:	37.0 m
Position of meter on rig	:	T
Meter type	:	S4
Meter started	:	04-AUG-88 12:00:00
Time of last valid scan	:	12-AUG-88 12:50:00
Period of good data	:	1.3 days short record
Total number of scans	:	185
Timing error	:	None
Comments	:	Meter damaged shortly after deployment

VELOCITY COMPONENT TIME SERIES PLOT

Meter no. 1112 Rig no. C33BC Depth of water(m) 52.0

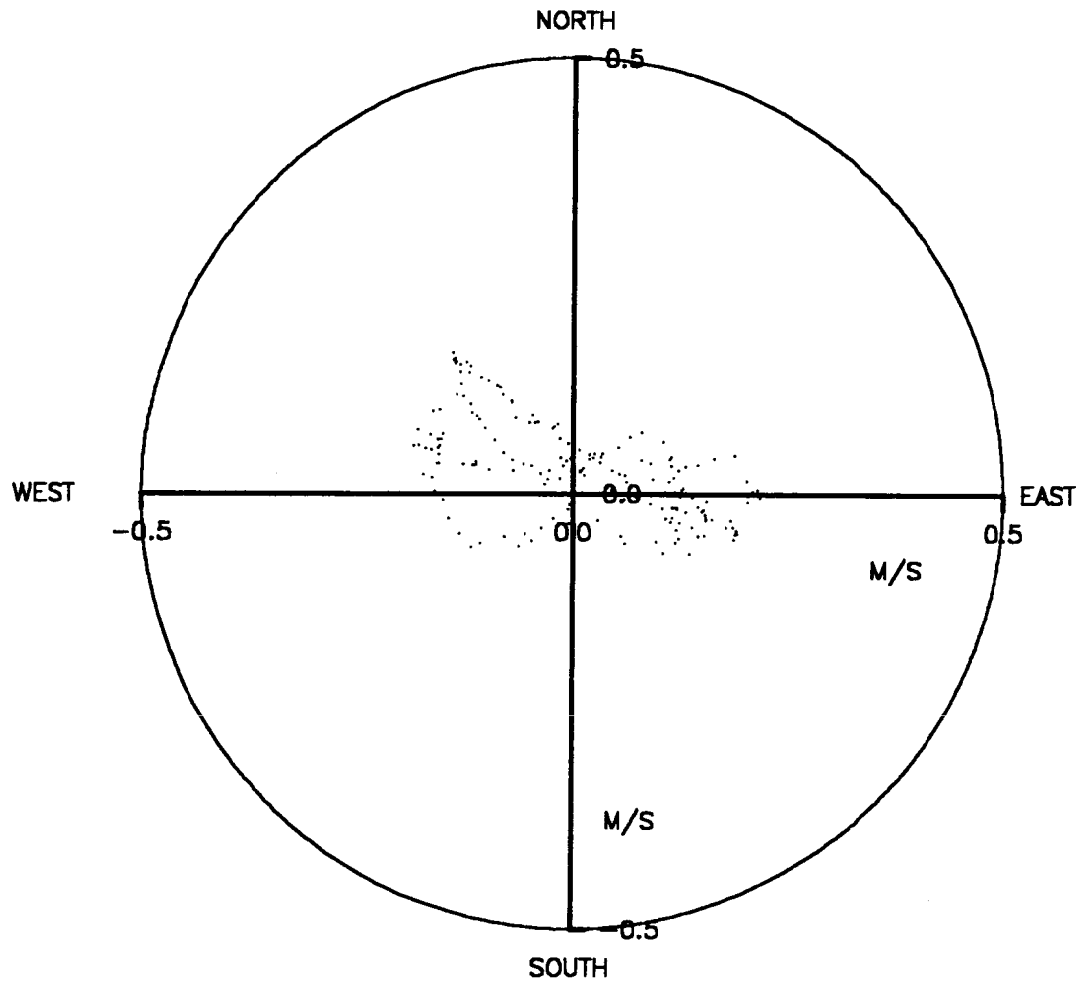
Start/End 1988/08/11 AT 06:09:00 1988/09/09 AT 21:25:00

Position 55 29.96N 05 30.74E Meter Height(m) 37.0



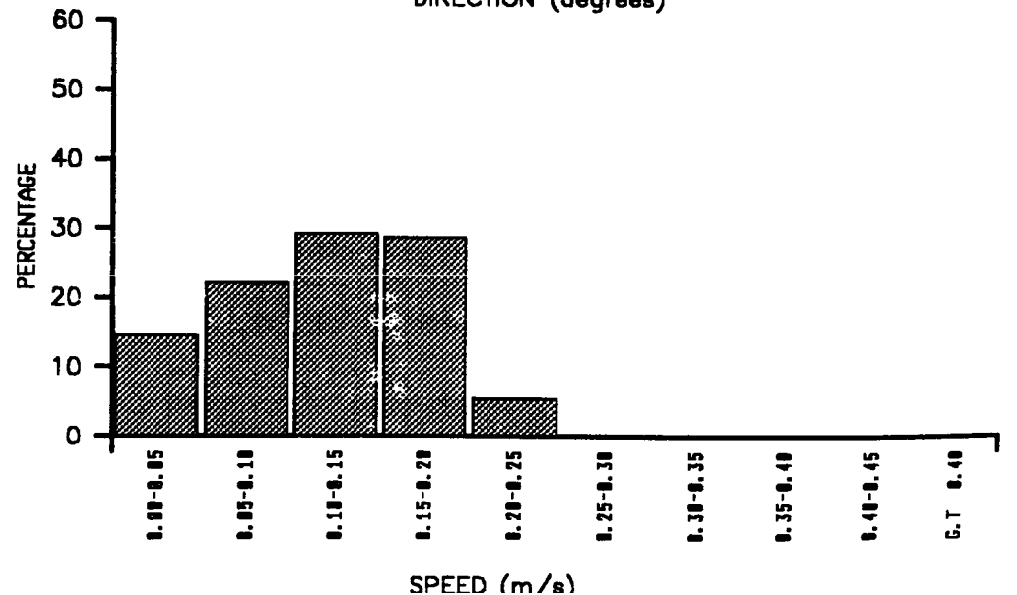
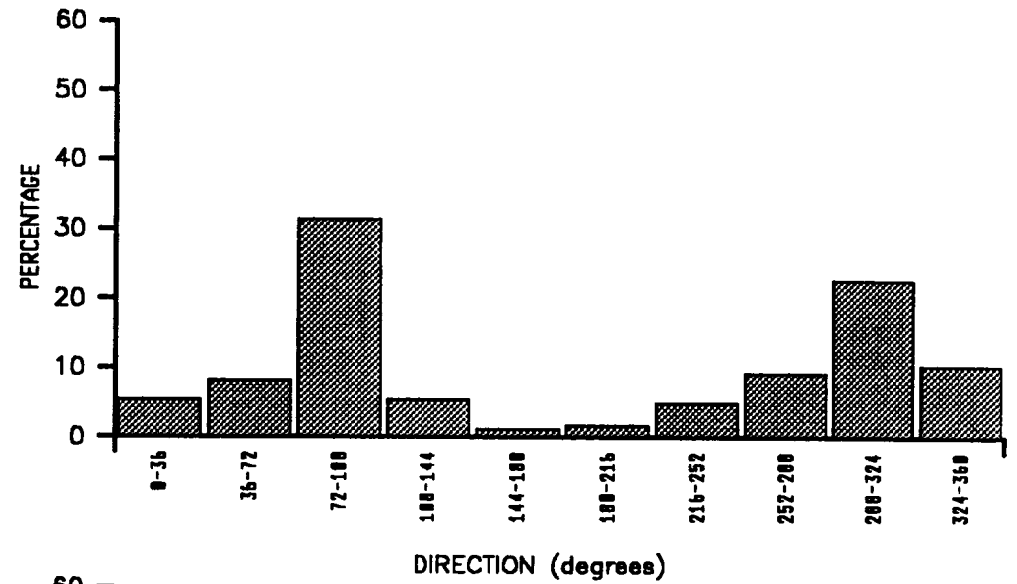
SCATTER PLOT

Meter no. 1112 Rig no. C33BC Depth of water(m) 52.0
 Start/End 1988/08/11 AT 06:09:00 1988/09/09 AT 21:25:00
 Position 55 29.96N 05 30.74E Meter Height(m) 37.0



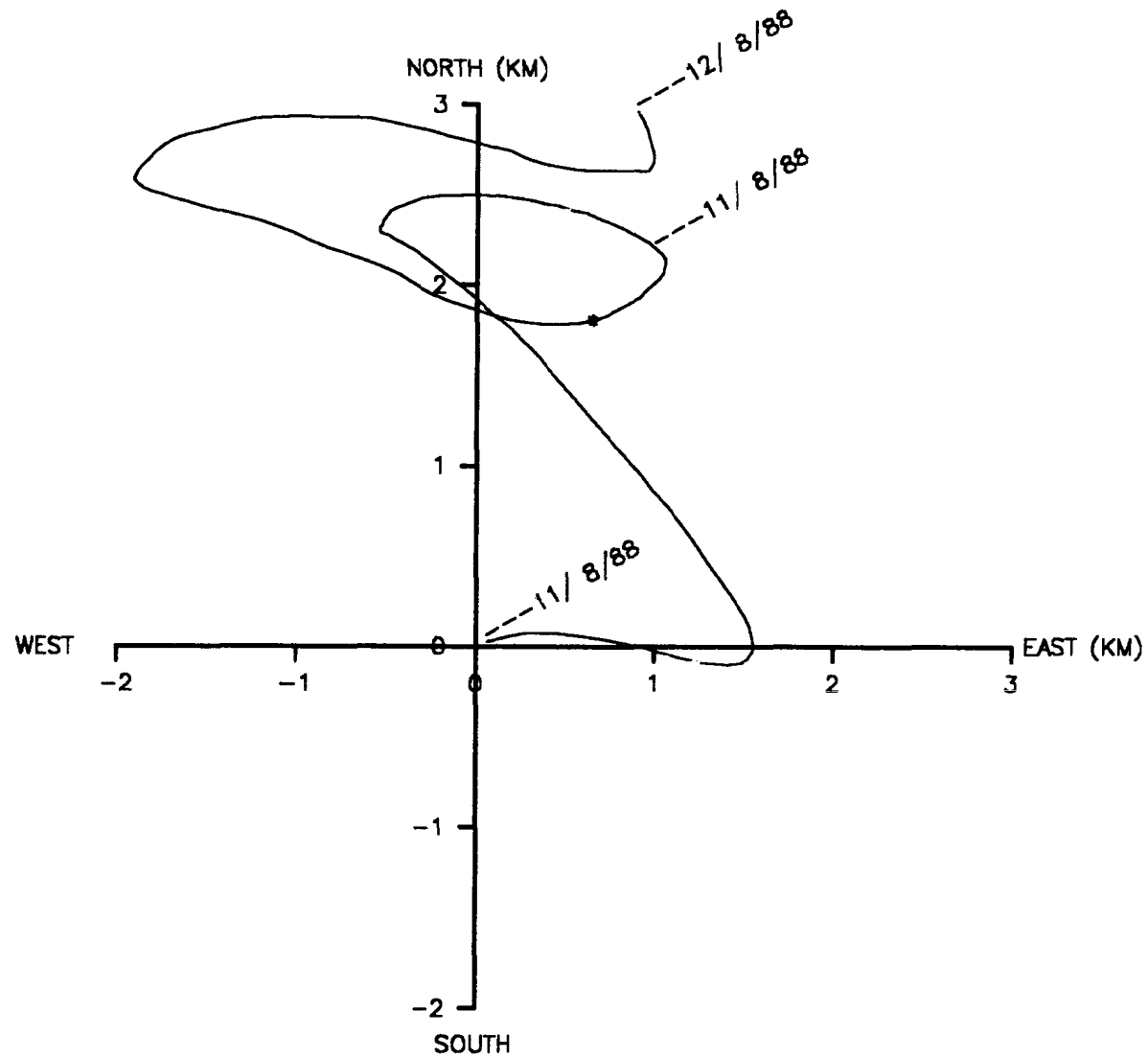
HISTOGRAMS FOR SPEEDS AND DIRECTIONS

Meter no. 1112 Rig no. C33BC Depth of water(m) 52.0
 Start/End 1988/08/11 AT 06:09:00 1988/09/09 AT 21:25:00
 Position 55 29.96N 05 30.74E Meter Height(m) 37.0



VECTOR PLOT

Meter no. 1112 Rig no. C33BC Depth of water(m) 52.0
Start/End 1988/08/11 AT 06:09:00 1988/09/09 AT 21:25:00
Position 55 29.96N 05 30.74E Meter Height(m) 37.0



STATISTICS FOR S41112T C33BCS A

	Mean	Variance	Standard deviation
Eastings	0.0082	0.13378073E-01	0.11566359E+00
Northings	0.0267	0.30455610E-02	0.55186603E-01
Speed	0.1190	0.29561582E-02	0.54370563E-01

Vector mean speed 0.0279

Vector Mean Direction 17.0

Maximum ten values

Eastings

Northings

0.219	0.216	0.210	0.205	0.204	0.161	0.155	0.153	0.152	0.150
0.193	0.192	0.191	0.190	0.189	0.149	0.148	0.146	0.140	0.138

Minimum ten values

Eastings

Northings

-0.160	-0.163	-0.163	-0.165	-0.166	-0.053	-0.054	-0.055	-0.056	-0.057
-0.171	-0.173	-0.179	-0.180	-0.185	-0.057	-0.061	-0.062	-0.069	-0.069

Maximum speeds

0.219	0.216	0.214	0.210	0.208	0.207	0.205	0.204	0.203	0.203
0.198	0.198	0.197	0.196	0.196	0.195	0.194	0.194	0.193	0.192
0.192	0.189	0.188	0.188	0.187	0.184	0.184	0.183	0.181	0.179
0.178	0.177	0.175	0.172	0.171	0.170	0.170	0.169	0.166	0.166
0.166	0.166	0.165	0.164	0.164	0.163	0.163	0.162	0.162	0.160
0.160	0.159	0.158	0.157	0.157	0.157	0.155	0.154	0.154	0.153
0.152	0.152	0.150	0.149	0.148	0.148	0.148	0.145	0.142	0.141
0.140	0.140	0.138	0.136	0.135	0.135	0.134	0.133	0.132	0.132
0.130	0.130	0.129	0.128	0.128	0.128	0.128	0.127	0.127	0.126
0.124	0.124	0.123	0.123	0.122	0.122	0.121	0.121	0.121	0.121

Variance ellipse statistics

Maximum variance 0.1462E-01

Direction -71.9

Minimum variance 0.1804E-02

Direction 18.1

Total variance 0.1642E-01

Ratio of variances 0.1234E+00

Average direction. maxdir -PI/2 to maxdir +PI/2 22.8

Average direction. maxdir +PI/2 to maxdir -PI/2 160.6

Meter information details for 1113

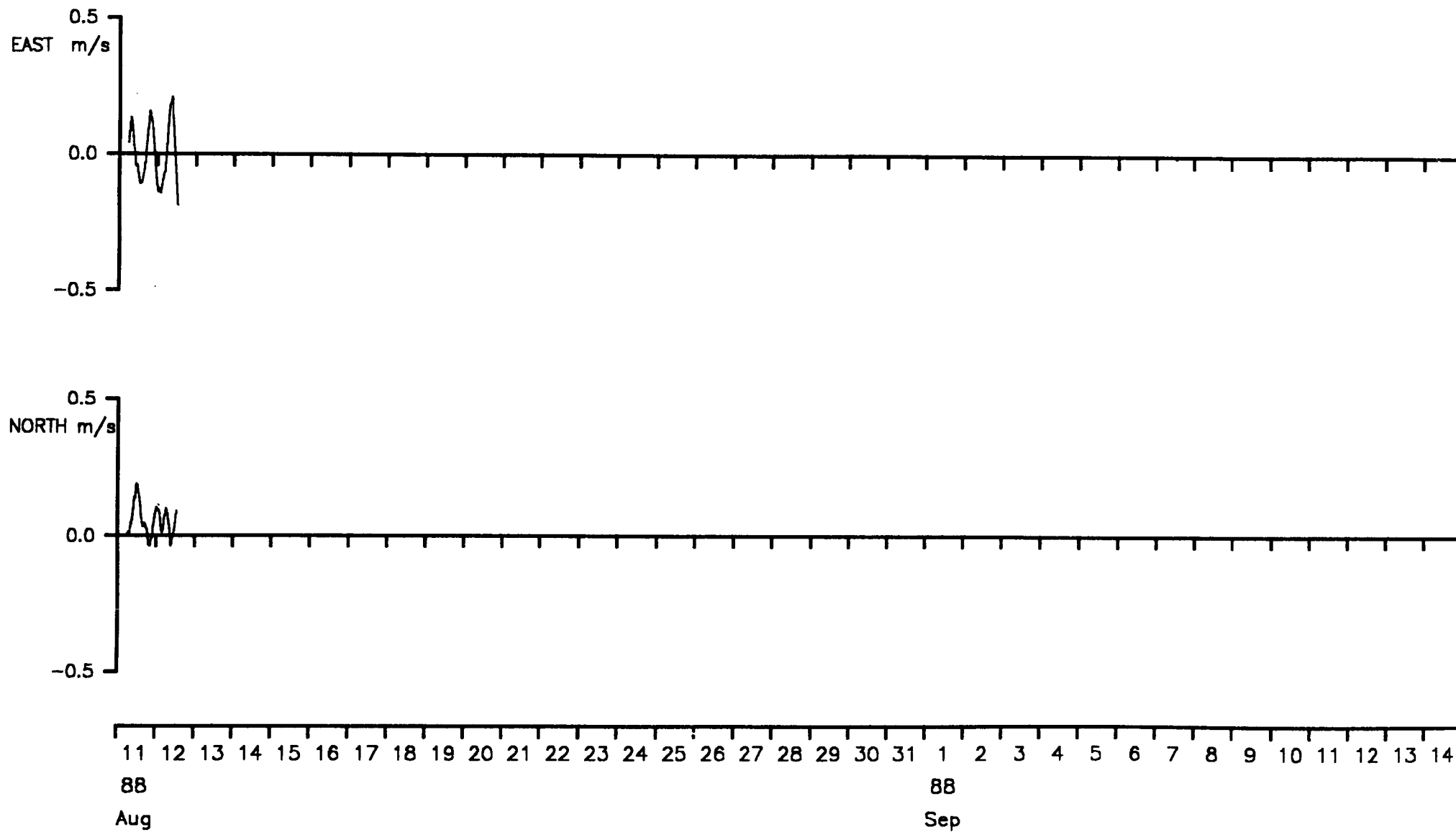
Rig No	:	C33BC
Meter No	:	1113
Recording interval	:	600.0 seconds
Meter height from bottom	:	27.0 m
Position of meter on rig	:	MT
Meter type	:	S4
Meter started	:	04-AUG-88 12:00:00
Time of last valid scan	:	12-AUG-88 12:50:00
Period of good data	:	1.3 days short record
Total number of scans	:	185
Timing error	:	None
Comments	:	<p>Meter damaged shortly after deployment Hourly time stamp has jumped by one minute at:</p> <p>(1) 23-SEPT-88 11:00 to 12:01</p> <p>(2) 08-NOV-88 11:01 to 12:02</p>

VELOCITY COMPONENT TIME SERIES PLOT

Meter no. 1113 Rig no. C33BC Depth of water(m) 52.0

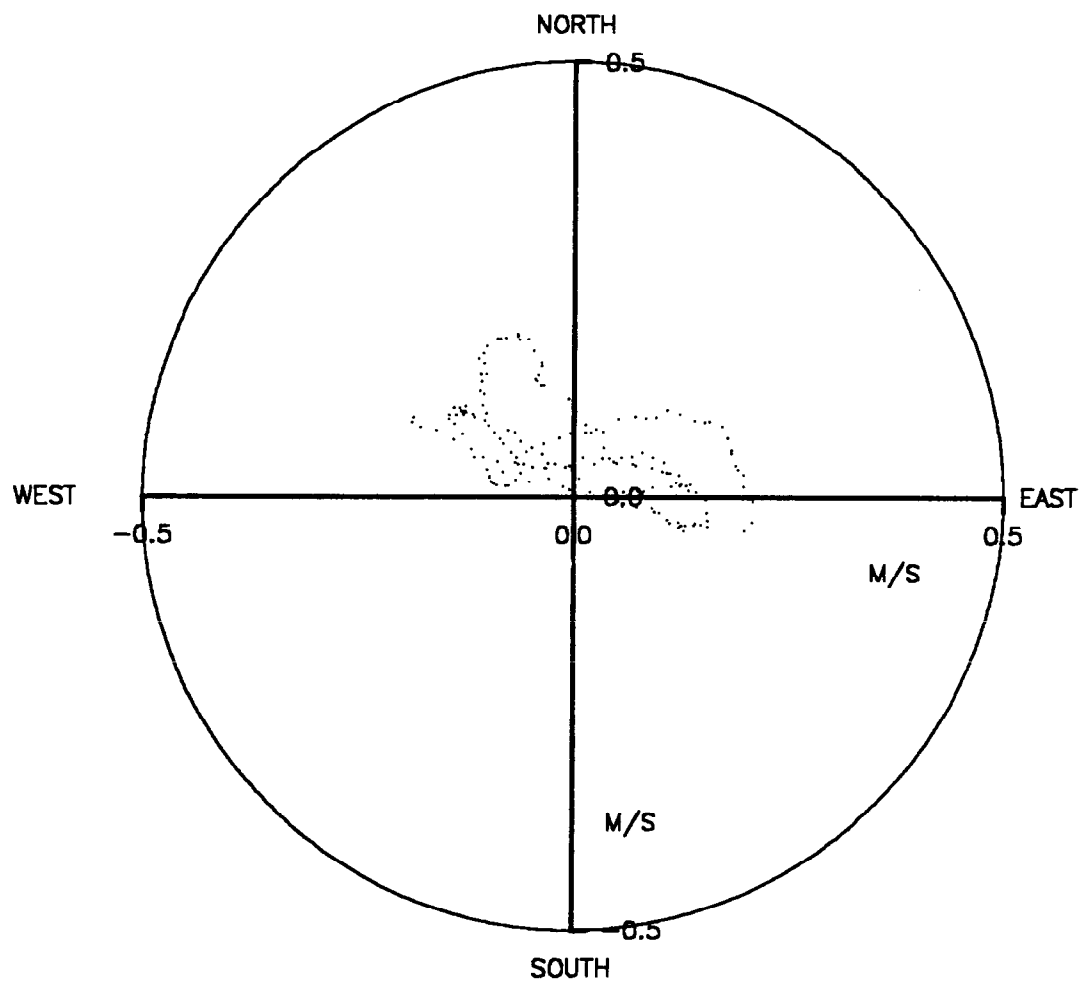
Start/End 1988/08/11 AT 06:09:00 1988/09/09 AT 21:25:00

Position 55 29.96N 05 30.74E Meter Height(m) 27.0



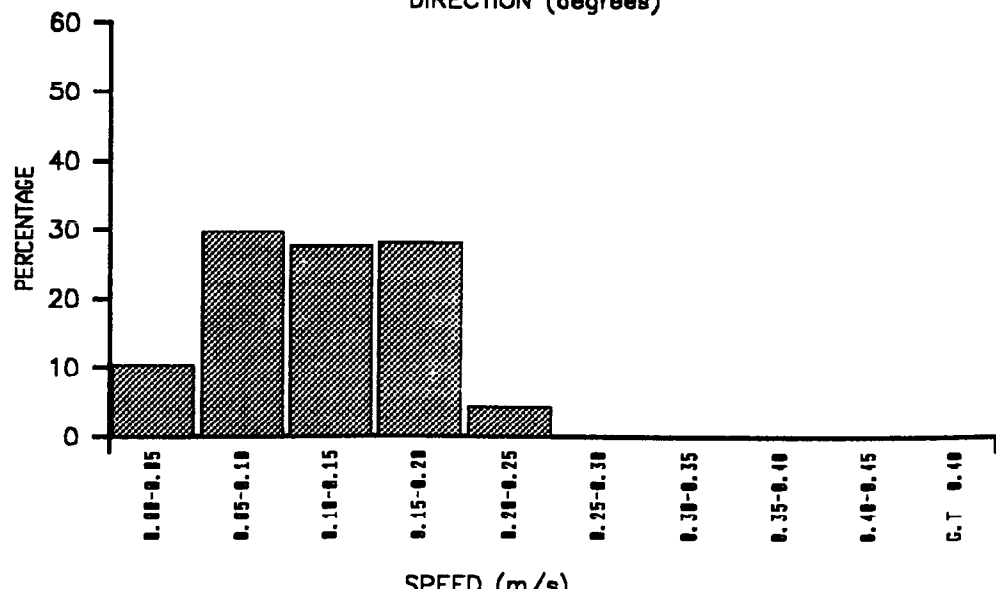
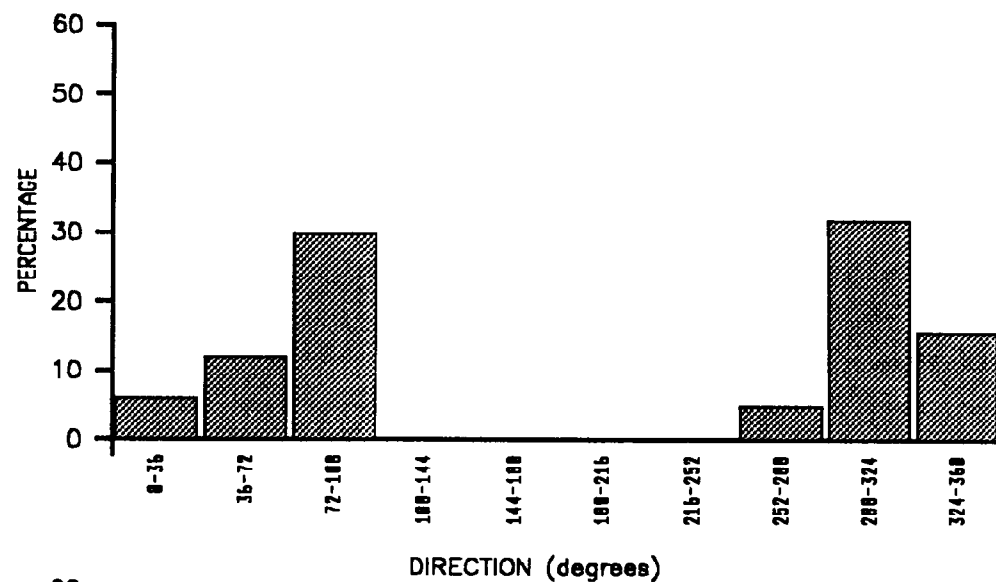
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 Start/End 1988/08/11 AT 06:09:00 1988/09/09 AT 21:25:00
 Position 55 29.96N 05 30.74E Meter Height(m) 27.0

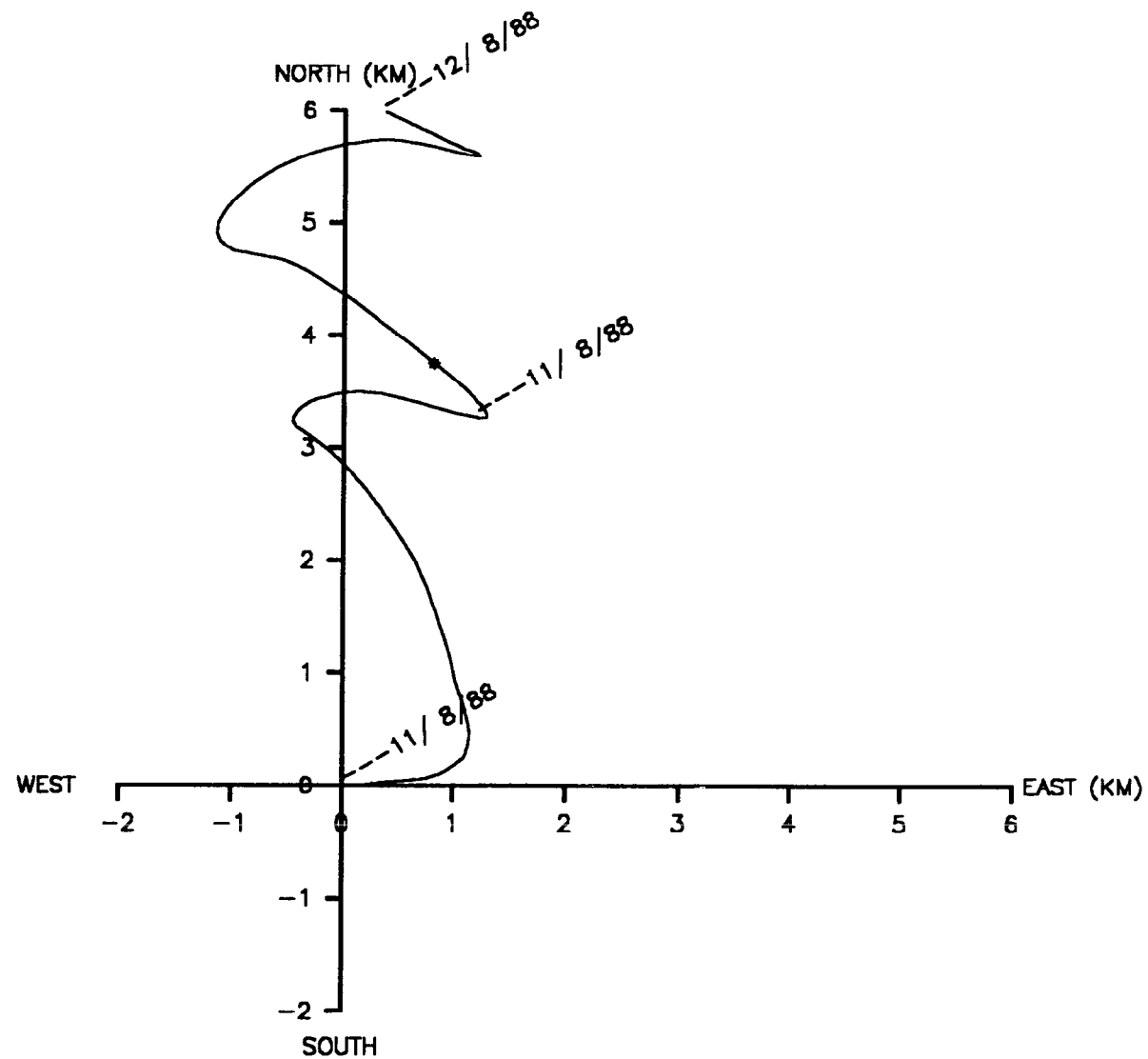


VECTOR PLOT

Meter no. 1113 Rig no. C33BC Depth of water(m) 52.0

Start/End 1988/08/11 AT 06:09:00 1988/09/09 AT 21:25:00

Position 55 29.96N 05 30.74E Meter Height(m) 27.0



STATISTICS FOR S41113MT C33BCS A

	Mean	Variance	Standard deviation
Eastings	0.0034	0.10843109E-01	0.10413027E+00
Northings	0.0539	0.30295730E-02	0.55041559E-01
Speed	0.1188	0.26098753E-02	0.51086940E-01

Vector mean speed 0.0540
 Vector Mean Direction 3.6

Maximum ten values									
Eastings					Northings				
0.209	0.208	0.198	0.198	0.197	0.187	0.185	0.182	0.182	0.182
0.191	0.189	0.184	0.184	0.179	0.182	0.181	0.173	0.168	0.165

Minimum ten values									
Eastings					Northings				
-0.138	-0.139	-0.139	-0.145	-0.145	-0.031	-0.033	-0.033	-0.034	-0.034
-0.145	-0.160	-0.178	-0.187	-0.188	-0.034	-0.034	-0.036	-0.040	-0.040

Maximum speeds									
0.210	0.209	0.208	0.207	0.202	0.202	0.201	0.200	0.199	0.199
0.198	0.198	0.196	0.195	0.195	0.193	0.193	0.192	0.192	0.191
0.191	0.190	0.190	0.189	0.185	0.180	0.177	0.177	0.174	0.174
0.174	0.172	0.172	0.170	0.170	0.170	0.167	0.166	0.165	0.163
0.163	0.162	0.161	0.161	0.161	0.160	0.160	0.159	0.159	0.159
0.158	0.157	0.156	0.156	0.155	0.155	0.154	0.154	0.151	0.150
0.149	0.148	0.148	0.146	0.146	0.145	0.144	0.143	0.142	0.141
0.139	0.136	0.134	0.134	0.134	0.134	0.134	0.133	0.132	0.132
0.131	0.131	0.130	0.128	0.127	0.127	0.126	0.125	0.125	0.124
0.123	0.123	0.120	0.118	0.116	0.116	0.116	0.114	0.114	0.113

Variance ellipse statistics

Maximum variance 0.1203E-01	Direction	-70.0
Minimum variance 0.1838E-02	Direction	20.0
Total variance 0.1387E-01	Ratio of variances	0.1527E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		27.9
Average direction. maxdir +PI/2 to maxdir -PI/2		148.8

Meter information details for 1114

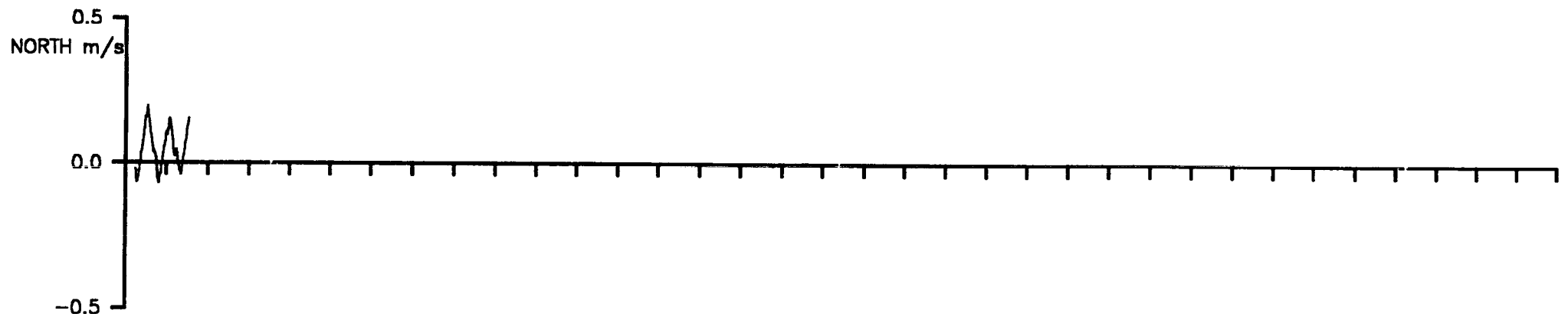
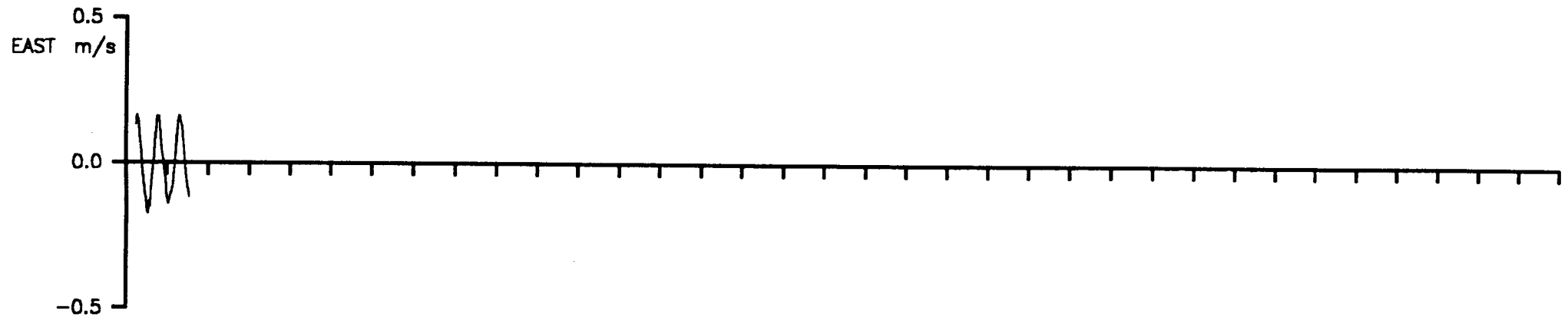
Rig No	:	C33BC
Meter No	:	1114
Recording interval	:	600.0 seconds
Meter height from bottom	:	15.0 m
Position of meter on rig	:	MB
Meter type	:	S4
Meter started	:	04-AUG-88 12:00:00
Time of last valid scan	:	12-AUG-88 12:50:00
Period of good data	:	1.3 days short record
Total number of scans	:	185
Timing error	:	None
Comments	:	Meter damaged shortly after deployment

VELOCITY COMPONENT TIME SERIES PLOT

Meter no. 1114 Rig no. C33BC Depth of water(m) 52.0

Start/End 1988/08/11 AT 06:09:00 1988/09/09 AT 21:25:00

Position 55 29.96N 05 30.74E Meter Height(m) 15.0



11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14

88

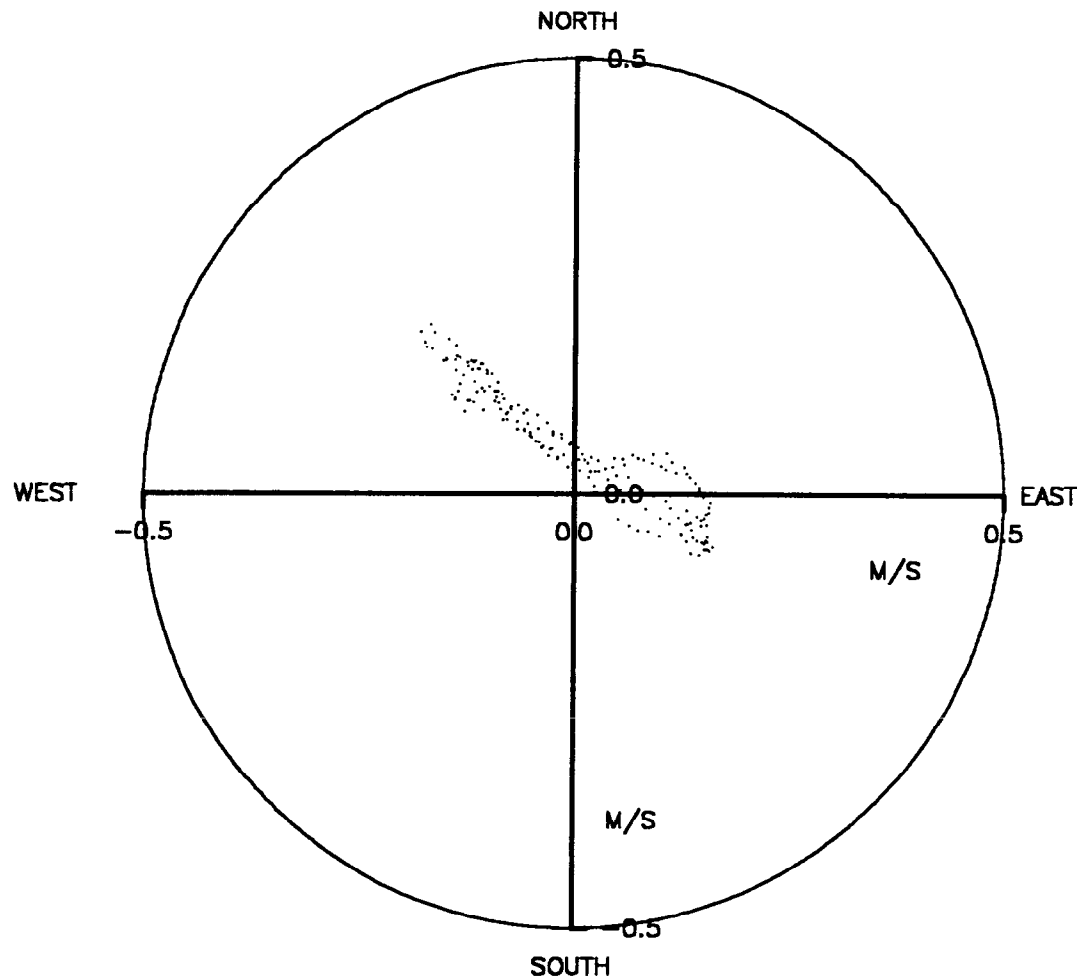
Aug

88

Sep

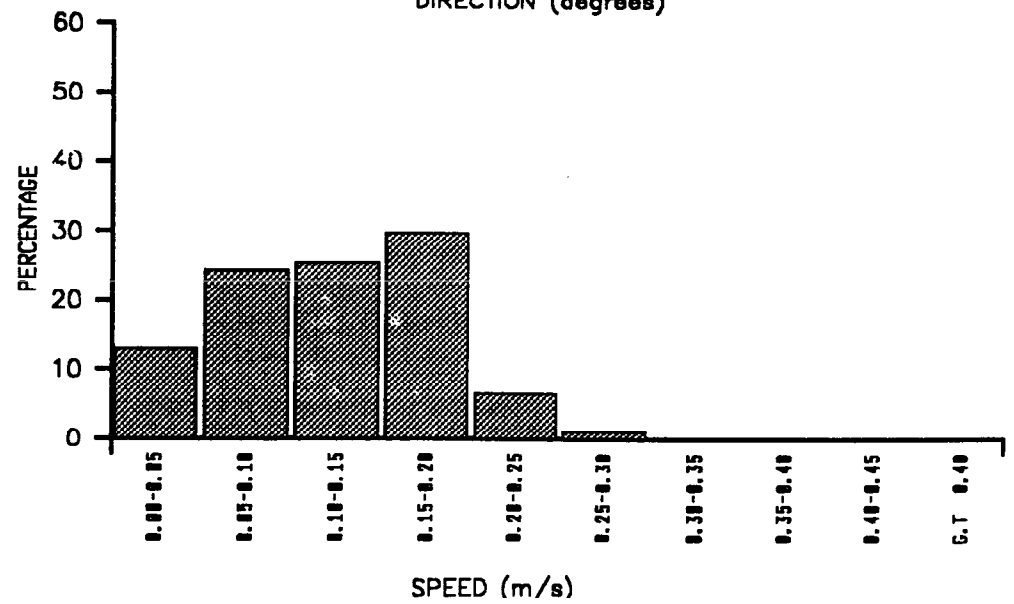
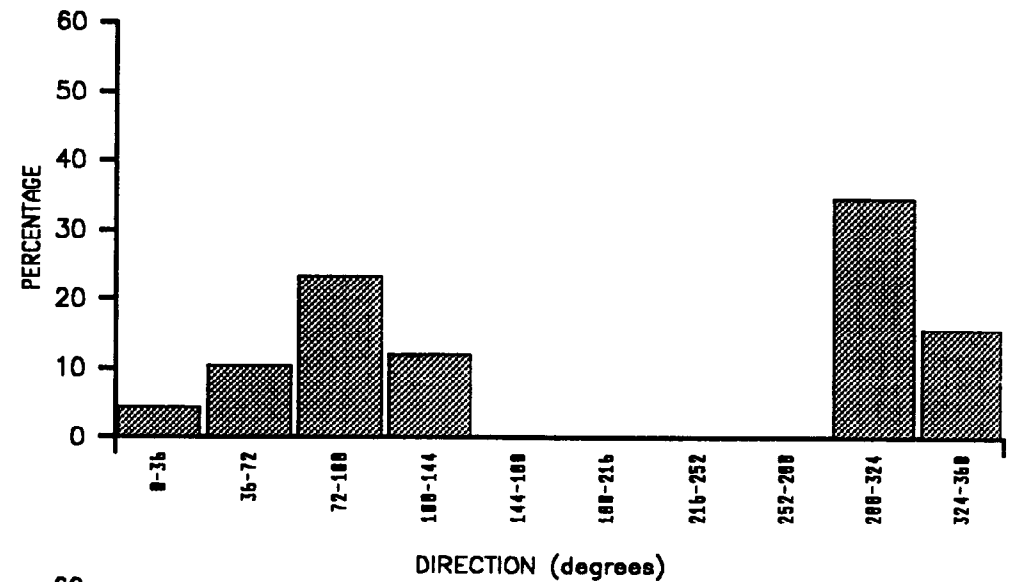
SCATTER PLOT

Meter no. 1114 Rig no. C33BC Depth of water(m) 52.0
 Start/End 1988/08/11 AT 06:09:00 1988/09/09 AT 21:25:00
 Position 55 29.96N 05 30.74E Meter Height(m) 15.0



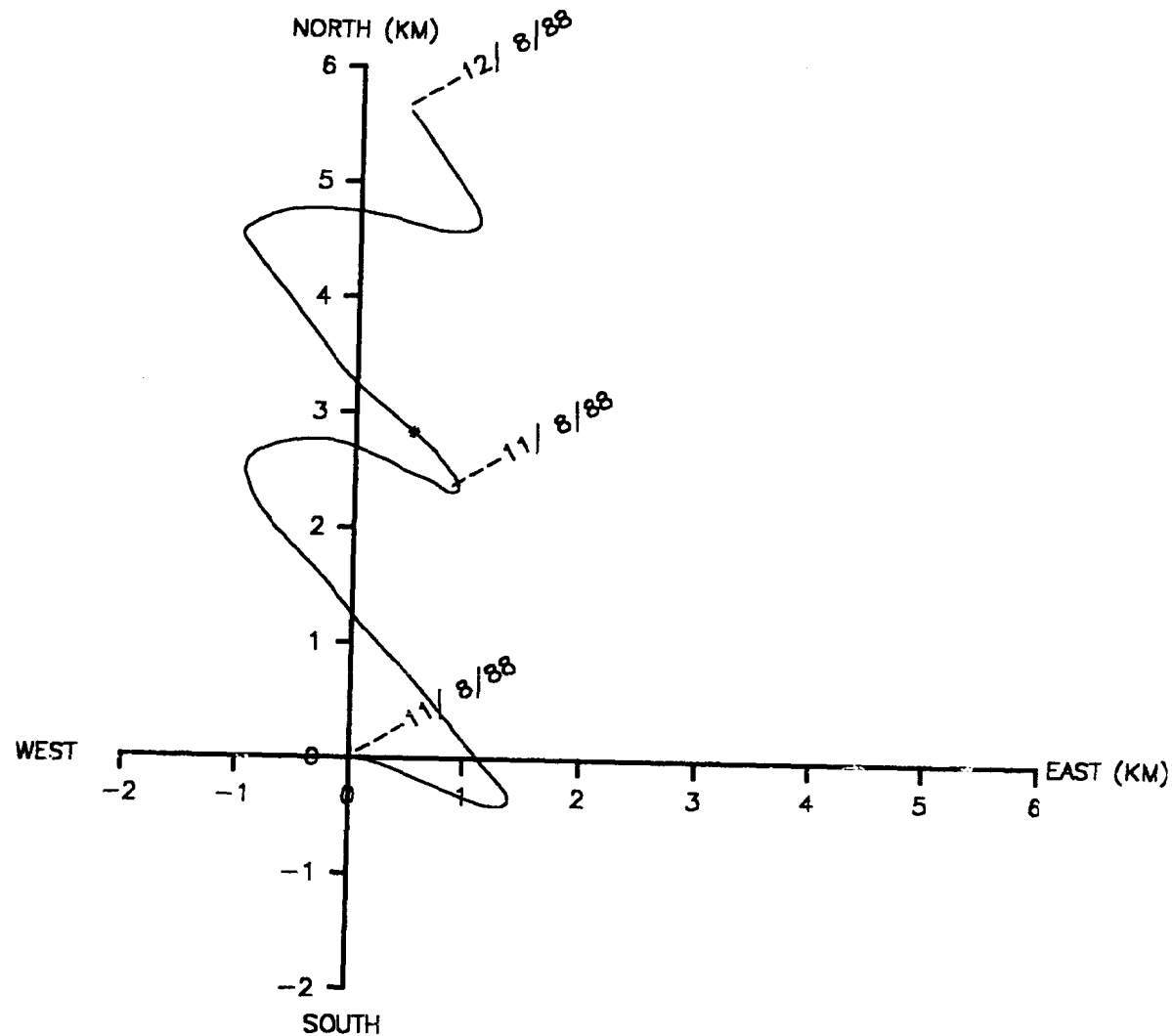
HISTOGRAMS FOR SPEEDS AND DIRECTIONS

Meter no. 1114 Rig no. C33BC Depth of water(m) 52.0
 Start/End 1988/08/11 AT 06:09:00 1988/09/09 AT 21:25:00
 Position 55 29.96N 05 30.74E Meter Height(m) 15.0



VECTOR PLOT

Meter no. 1114 Rig no. C33BC Depth of water(m) 52.0
Start/End 1988/08/11 AT 06:09:00 1988/09/09 AT 21:25:00
Position 55 29.96N 05 30.74E Meter Height(m) 15.0



STATISTICS FOR S41114MB C33BCS A

	Mean	Variance	Standard deviation
Eastings	0.0039	0.10964807E-01	0.10471296E+00
Northings	0.0506	0.47478192E-02	0.68904400E-01
Speed	0.1227	0.31650970E-02	0.56259193E-01

Vector mean speed 0.0507
Vector Mean Direction 4.4

Maximum ten values									
Eastings					Northings				
0.161	0.159	0.157	0.157	0.157	0.194	0.186	0.184	0.177	0.174
0.155	0.155	0.155	0.154	0.154	0.170	0.168	0.166	0.158	0.156

Minimum ten values									
Eastings					Northings				
-0.145	-0.148	-0.148	-0.152	-0.161	-0.056	-0.057	-0.059	-0.062	-0.064
-0.164	-0.166	-0.170	-0.173	-0.177	-0.065	-0.065	-0.066	-0.069	-0.071

Maximum speeds									
0.257	0.255	0.245	0.245	0.239	0.234	0.229	0.218	0.215	0.214
0.213	0.208	0.206	0.204	0.197	0.194	0.194	0.191	0.190	0.190
0.187	0.187	0.184	0.184	0.183	0.182	0.181	0.181	0.180	0.178
0.176	0.174	0.174	0.173	0.172	0.171	0.170	0.168	0.167	0.165
0.165	0.165	0.163	0.163	0.162	0.162	0.162	0.162	0.161	0.161
0.159	0.159	0.159	0.158	0.158	0.158	0.158	0.156	0.156	0.155
0.155	0.154	0.154	0.153	0.152	0.152	0.151	0.150	0.150	0.149
0.148	0.147	0.146	0.146	0.146	0.142	0.142	0.142	0.142	0.141
0.141	0.140	0.140	0.137	0.137	0.136	0.135	0.135	0.133	0.133
0.133	0.133	0.132	0.128	0.125	0.123	0.121	0.121	0.120	0.120

Variance ellipse statistics

Maximum variance 0.1532E-01	Direction	-57.3
Minimum variance 0.3958E-03	Direction	32.7
Total variance 0.1571E-01	Ratio of variances	0.2584E-01
Average direction. maxdir -PI/2 to maxdir +PI/2		25.0
Average direction. maxdir +PI/2 to maxdir -PI/2		147.3

Meter information details for 9347

Rig No	:	C33BC
Meter No	:	9347
Recording interval	:	600.0 seconds
Meter height from bottom	:	7.0 m
Position of meter on rig	:	B
Meter type	:	AS
Meter started	:	09-AUG-88 15:29:00
Meter stopped	:	10-SEPT-88 15:39:00
Period switched on	:	32.0 days
Period of good data	:	0.0 days
Comments	:	Meter damaged shortly after deployment

Rig information details for C35BC

Position Latitude	:	55 29.90N
Position Longitude	:	05 30.40E
Water depth	:	52.0 m
Deployed on cruise	:	C35
Recovered on cruise	:	C39
Site name identification	:	B
Magnetic deviation	:	2.8 degrees west
Rig deployed on	:	10-SEPT-88 00:11:00
Rig recovered on	:	07-NOV-88 10:00:00
Period of deployment	:	58.4 days
Comments	:	Launch and recovery successful

Meter information details for 1120

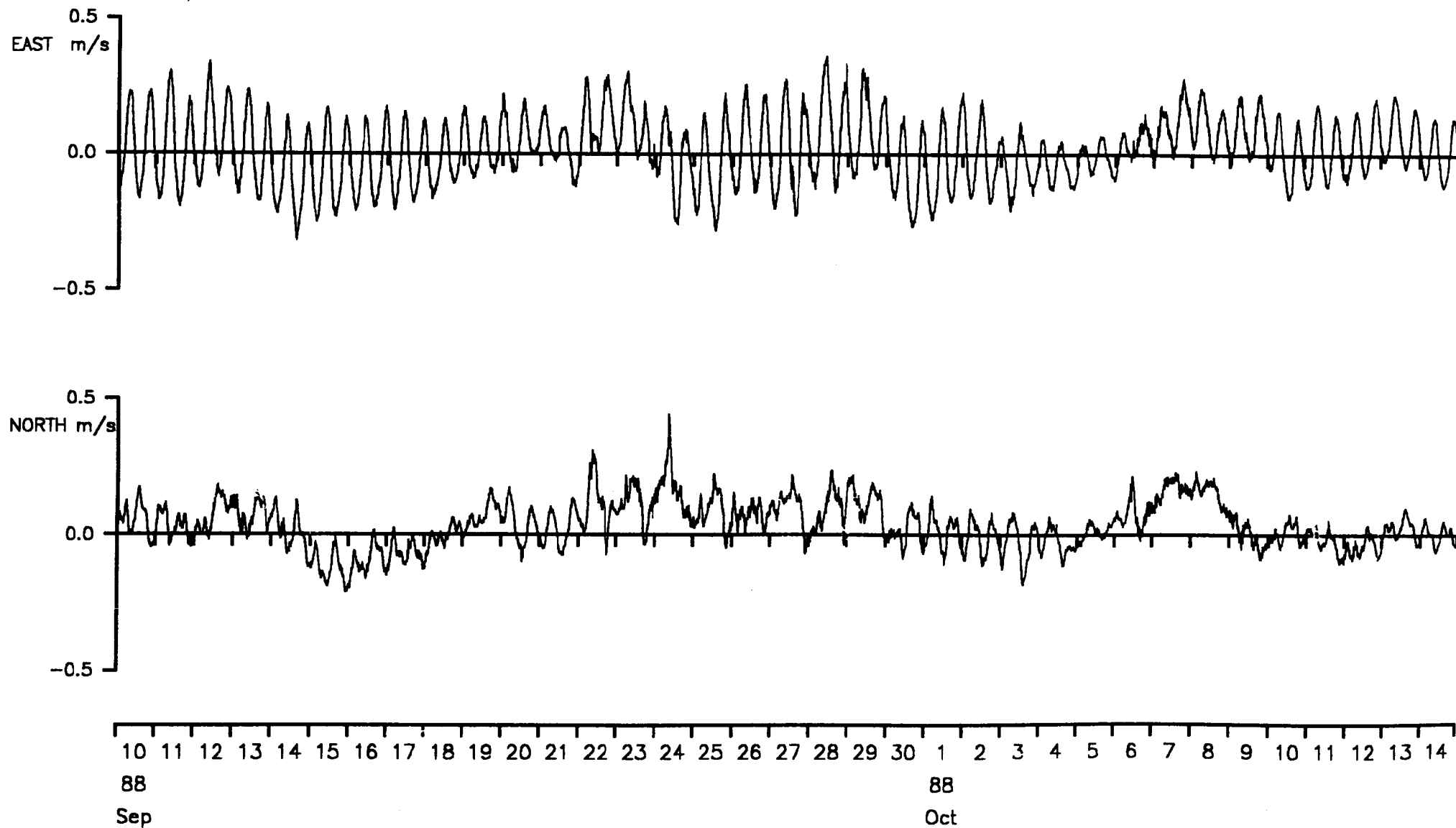
Rig No	:	C35BC
Meter No	:	1120
Recording interval	:	600.0 seconds
Meter height from bottom	:	37.0 m
Position of meter on rig	:	T
Meter type	:	S4
Meter started	:	09-SEPT-88 22:00:00
Meter stopped	:	07-NOV-88 11:00:00
Period switched on	:	58.5 days
Period of good data	:	58.4 days
Total number of scans	:	8410
Timing error	:	None
Comments	:	Good record obtained

VELOCITY COMPONENT TIME SERIES PLOT

Meter no. 1120 Rig no. C35BC Depth of water(m) 52.0

Start/End 1988/09/10 AT 00:11:00 1988/11/07 AT 10:00:00

Position 55 29.90N 05 30.40E Meter Height(m) 37.0

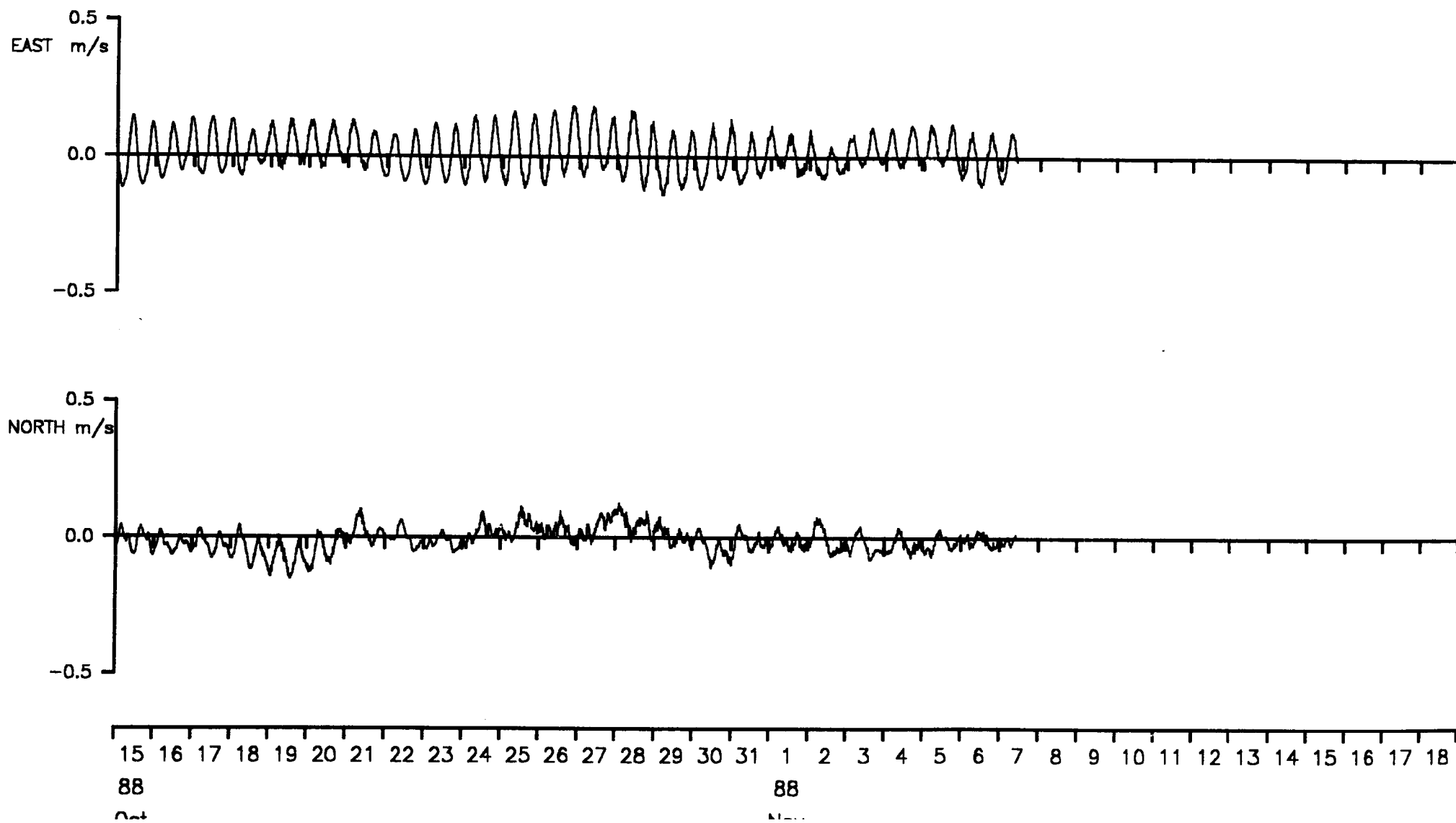


VELOCITY COMPONENT TIME SERIES PLOT

Meter no. 1120 Rig no. C35BC Depth of water(m) 52.0

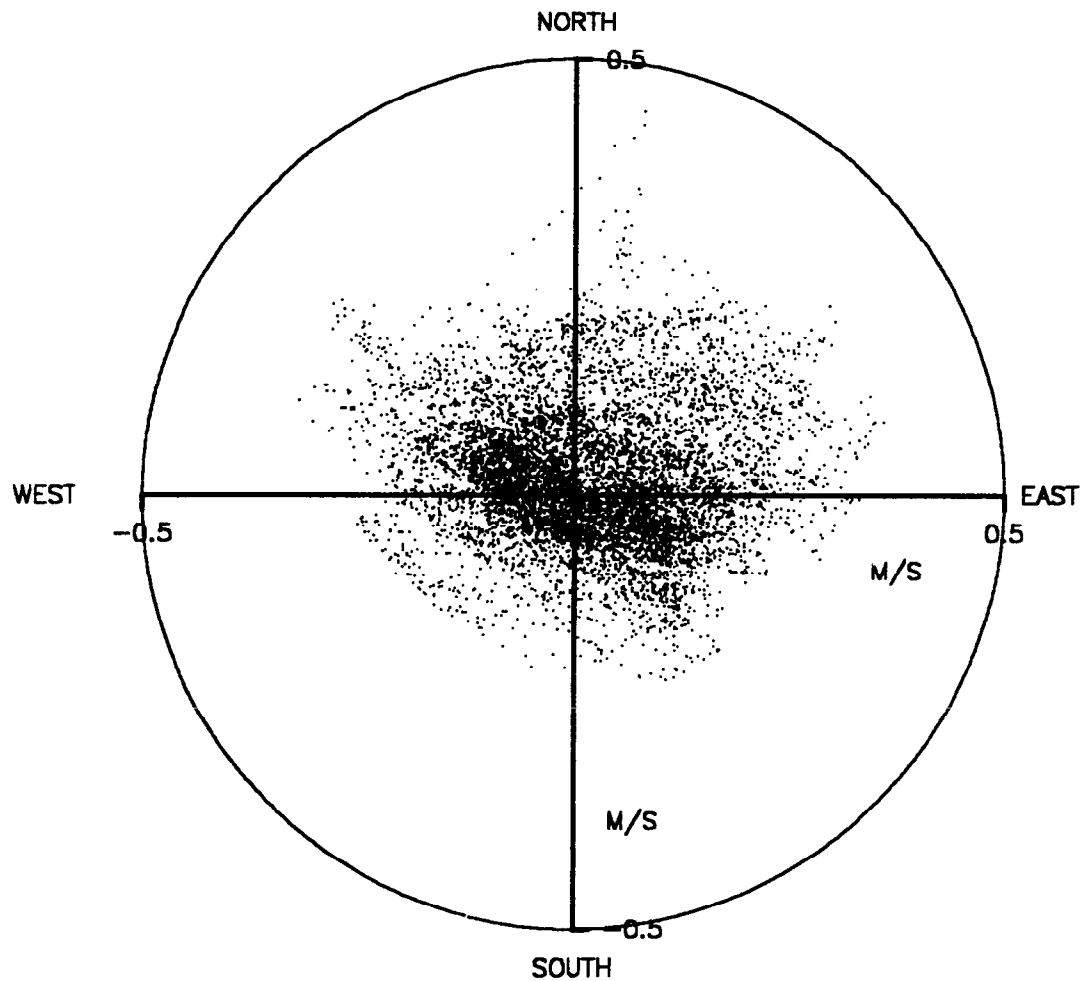
Start/End 1988/09/10 AT 00:11:00 1988/11/07 AT 10:00:00

Position 55 29.90N 05 30.40E Meter Height(m) 37.0



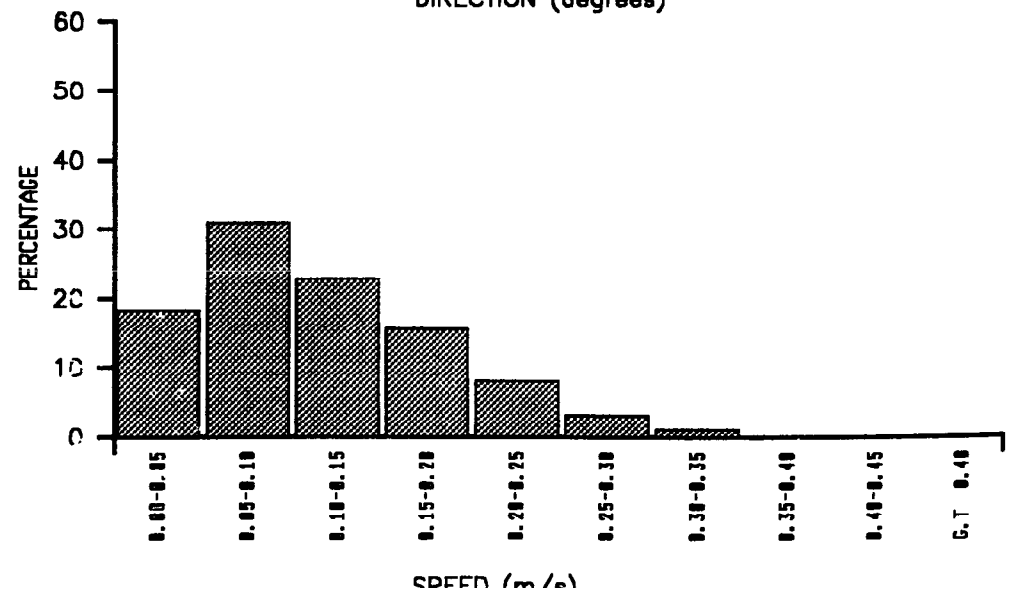
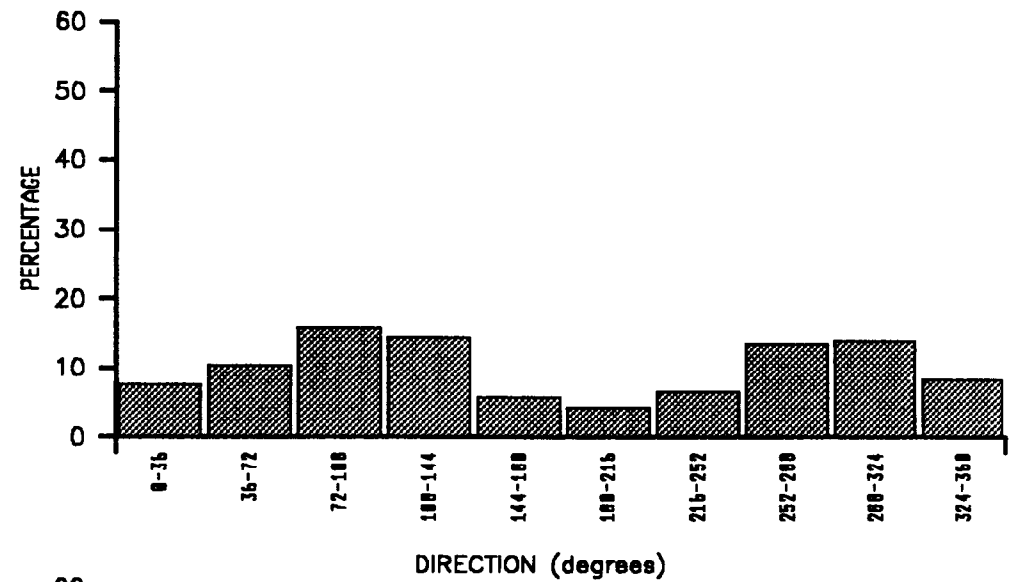
SCATTER PLOT

Meter no. 1120 Rig no. C35BC Depth of water(m) 52.0
 Start/End 1988/09/10 AT 00:11:00 1988/11/07 AT 10:00:00
 Position 55 29.90N 05 30.40E Meter Height(m) 37.0



HISTOGRAMS FOR SPEEDS AND DIRECTIONS

Meter no. 1120 Rig no. C35BC Depth of water(m) 52.0
 Start/End 1988/09/10 AT 00:11:00 1988/11/07 AT 10:00:00
 Position 55 29.90N 05 30.40E Meter Height(m) 37.0

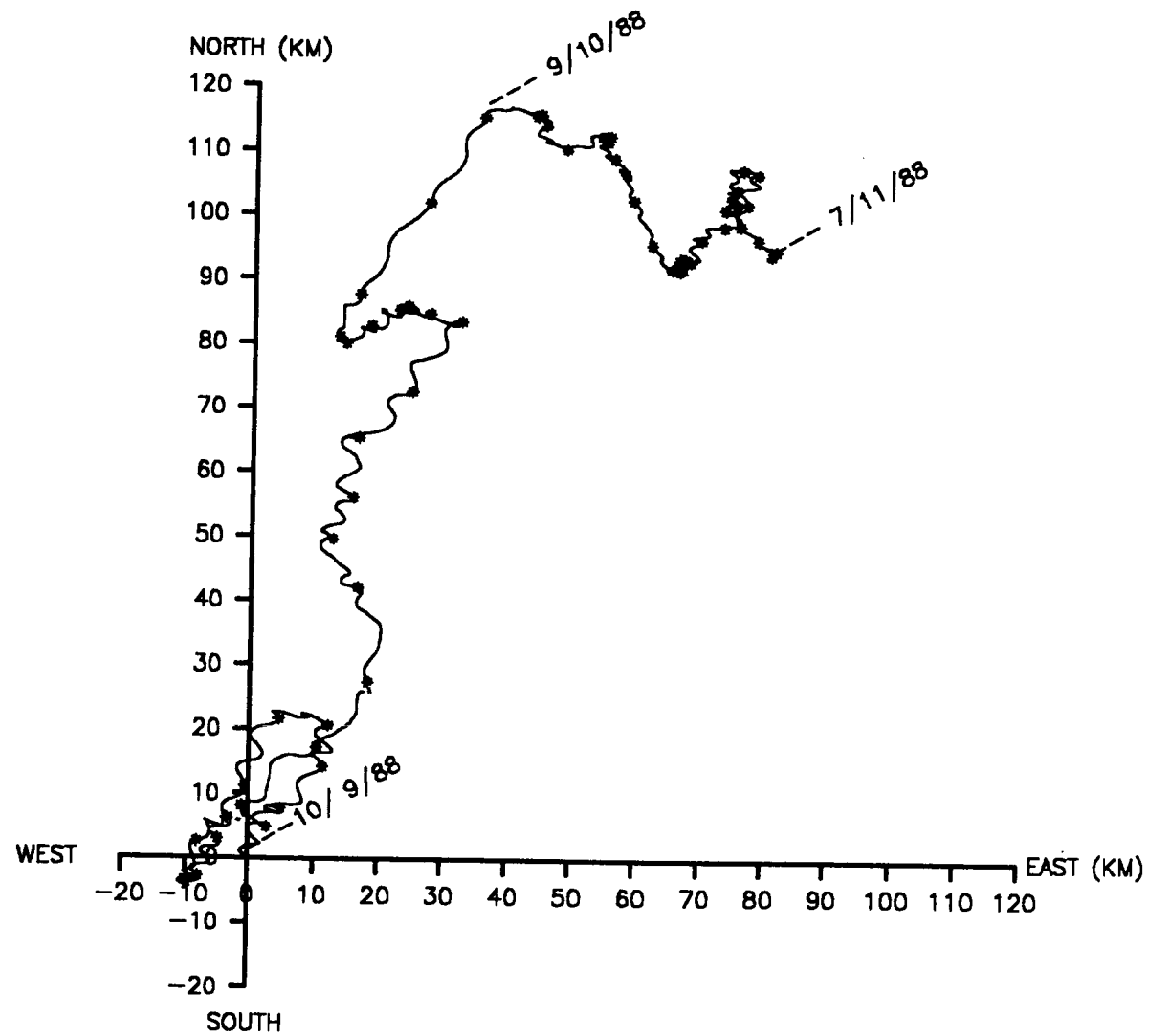


VECTOR PLOT

Meter no. 1120 Rig no. C35BC Depth of water(m) 52.0

Start/End 1988/09/10 AT 00:11:00 1988/11/07 AT 10:00:00

Position 55 29.90N 05 30.40E Meter Height(m) 37.0



STATISTICS FOR S41120T C35BCS A

	Mean	Variance	Standard deviation
Eastings	0.0161	0.11306975E-01	0.10633421E+00
Northings	0.0185	0.59415214E-02	0.77081263E-01
Speed	0.1142	0.47878884E-02	0.69194555E-01

Vector mean speed 0.0245
Vector Mean Direction 41.0

Maximum ten values									
Eastings					Northings				
0.360	0.350	0.348	0.345	0.345	0.440	0.424	0.410	0.401	0.364
0.342	0.342	0.339	0.338	0.336	0.353	0.352	0.346	0.327	0.326

Minimum ten values									
Eastings					Northings				
-0.281	-0.282	-0.282	-0.286	-0.288	-0.200	-0.201	-0.202	-0.204	-0.206
-0.289	-0.290	-0.302	-0.304	-0.320	-0.209	-0.209	-0.211	-0.211	-0.213

Maximum speeds									
0.448	0.432	0.415	0.403	0.370	0.367	0.365	0.363	0.362	0.360
0.359	0.358	0.356	0.354	0.354	0.353	0.352	0.351	0.350	0.347
0.346	0.344	0.344	0.343	0.342	0.341	0.340	0.340	0.338	0.338
0.337	0.337	0.336	0.335	0.334	0.334	0.331	0.331	0.331	0.331
0.330	0.330	0.330	0.327	0.326	0.326	0.325	0.324	0.323	0.323
0.322	0.321	0.320	0.318	0.317	0.317	0.316	0.316	0.316	0.316
0.316	0.316	0.316	0.315	0.315	0.315	0.314	0.313	0.313	0.313
0.312	0.312	0.312	0.311	0.311	0.311	0.311	0.310	0.310	0.310
0.310	0.310	0.309	0.307	0.307	0.307	0.305	0.305	0.305	0.305
0.305	0.305	0.304	0.304	0.304	0.304	0.303	0.303	0.303	0.302

Variance ellipse statistics

Maximum variance 0.1137E-01	Direction	-83.7
Minimum variance 0.5876E-02	Direction	6.3
Total variance 0.1725E-01	Ratio of variances	0.5167E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		34.7
Average direction. maxdir +PI/2 to maxdir -PI/2		177.7

STATISTICS FOR S41120T C35BCSF A

	Mean	Variance	Standard deviation
Eastings	0.0150	0.24598679E-02	0.49597051E-01
Northings	0.0188	0.42225793E-02	0.64981401E-01
Speed	0.0684	0.25564239E-02	0.50561093E-01

Vector mean speed 0.0240
Vector Mean Direction 38.5

Maximum ten values									
Eastings					Northings				
0.158	0.154	0.142	0.139	0.138	0.193	0.187	0.185	0.174	0.168
0.129	0.127	0.122	0.113	0.112	0.166	0.164	0.162	0.144	0.142

Minimum ten values									
Eastings					Northings				
-0.069	-0.070	-0.071	-0.071	-0.076	-0.077	-0.081	-0.084	-0.085	-0.094
-0.085	-0.092	-0.092	-0.094	-0.094	-0.105	-0.114	-0.128	-0.131	-0.137

Maximum speeds									
0.238	0.234	0.222	0.211	0.195	0.192	0.190	0.182	0.181	0.176
0.175	0.175	0.174	0.170	0.165	0.160	0.158	0.155	0.154	0.153
0.150	0.146	0.141	0.140	0.138	0.137	0.135	0.130	0.126	0.124
0.117	0.117	0.113	0.112	0.111	0.110	0.106	0.104	0.104	0.101
0.101	0.101	0.099	0.098	0.097	0.096	0.096	0.095	0.094	0.094
0.093	0.093	0.093	0.093	0.093	0.092	0.088	0.088	0.087	0.087
0.087	0.086	0.085	0.085	0.084	0.083	0.083	0.082	0.082	0.080
0.079	0.079	0.078	0.078	0.078	0.077	0.077	0.076	0.076	0.075
0.074	0.074	0.074	0.074	0.072	0.070	0.069	0.069	0.069	0.065
0.065	0.064	0.064	0.063	0.063	0.062	0.061	0.059	0.058	0.058

Variance ellipse statistics

Maximum variance 0.5171E-02	Direction	30.6
Minimum variance 0.1512E-02	Direction	120.6
Total variance 0.6682E-02	Ratio of variances	0.2924E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		2.3
Average direction. maxdir +PI/2 to maxdir -PI/2		171.2

Meter information details for 1119

Rig No	:	C35BC
Meter No	:	1119
Recording interval	:	600.0 seconds
Meter height from bottom	:	27.0 m
Position of meter on rig	:	MT
Meter type	:	S4
Meter started	:	09-SEPT-88 22:00:00
Meter stopped	:	07-NOV-88 15:01:00
Period switched on	:	58.7 days
Period of good data	:	58.4 days
Total number of scans	:	8410
Timing error	:	60 seconds slow
Comments	:	Hourly time stamp has jumped by one minute at: (1) 23-OCT-88 21:00 to 22:01

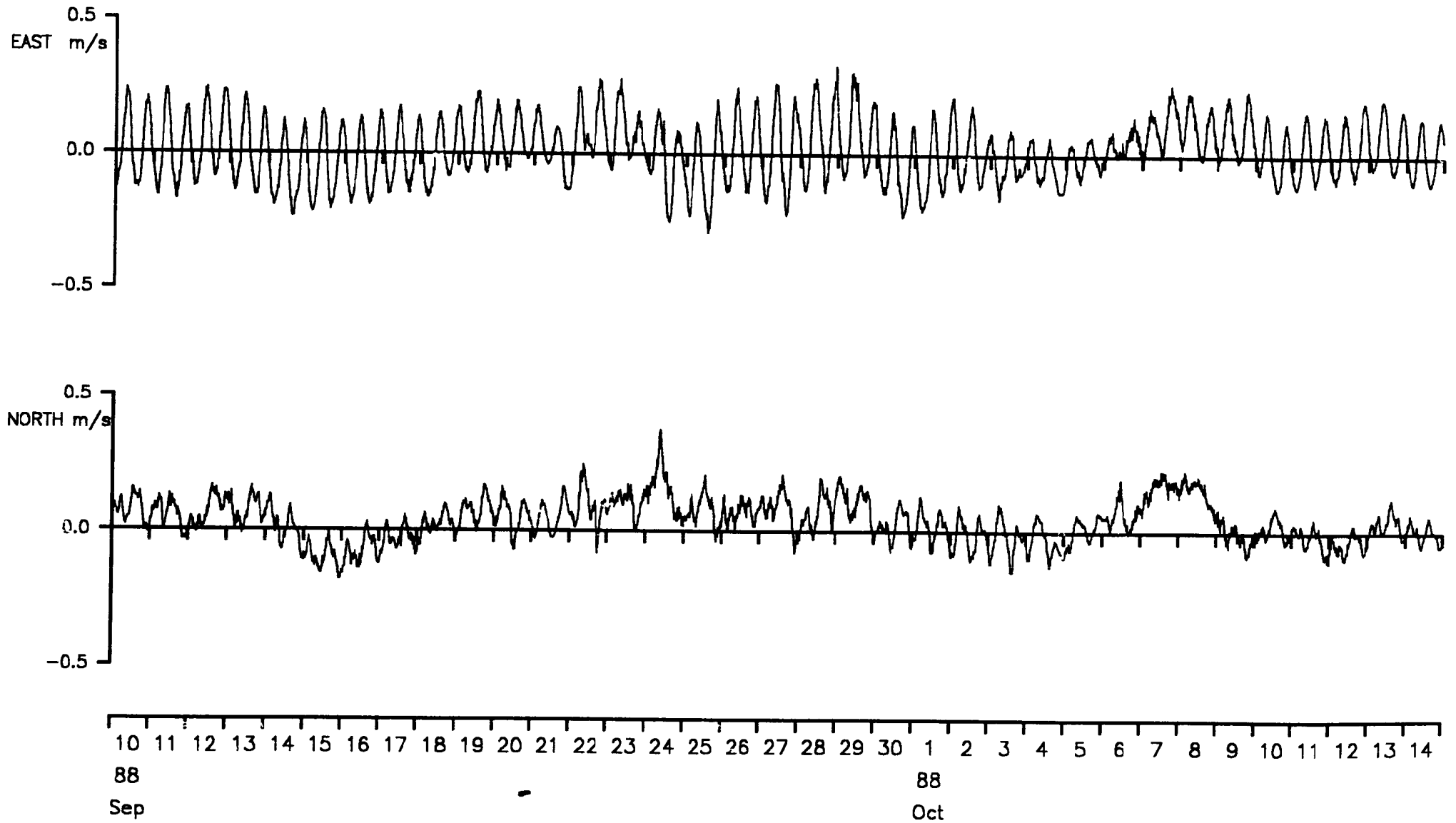
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VELOCITY COMPONENT TIME SERIES PLOT

Meter no. 1119 Rig no. C35BC Depth of water(m) 52.0

Start/End 1988/09/10 AT 00:11:00 1988/11/07 AT 10:00:00

Position 55 29.90N 05 30.40E Meter Height(m) 27.0

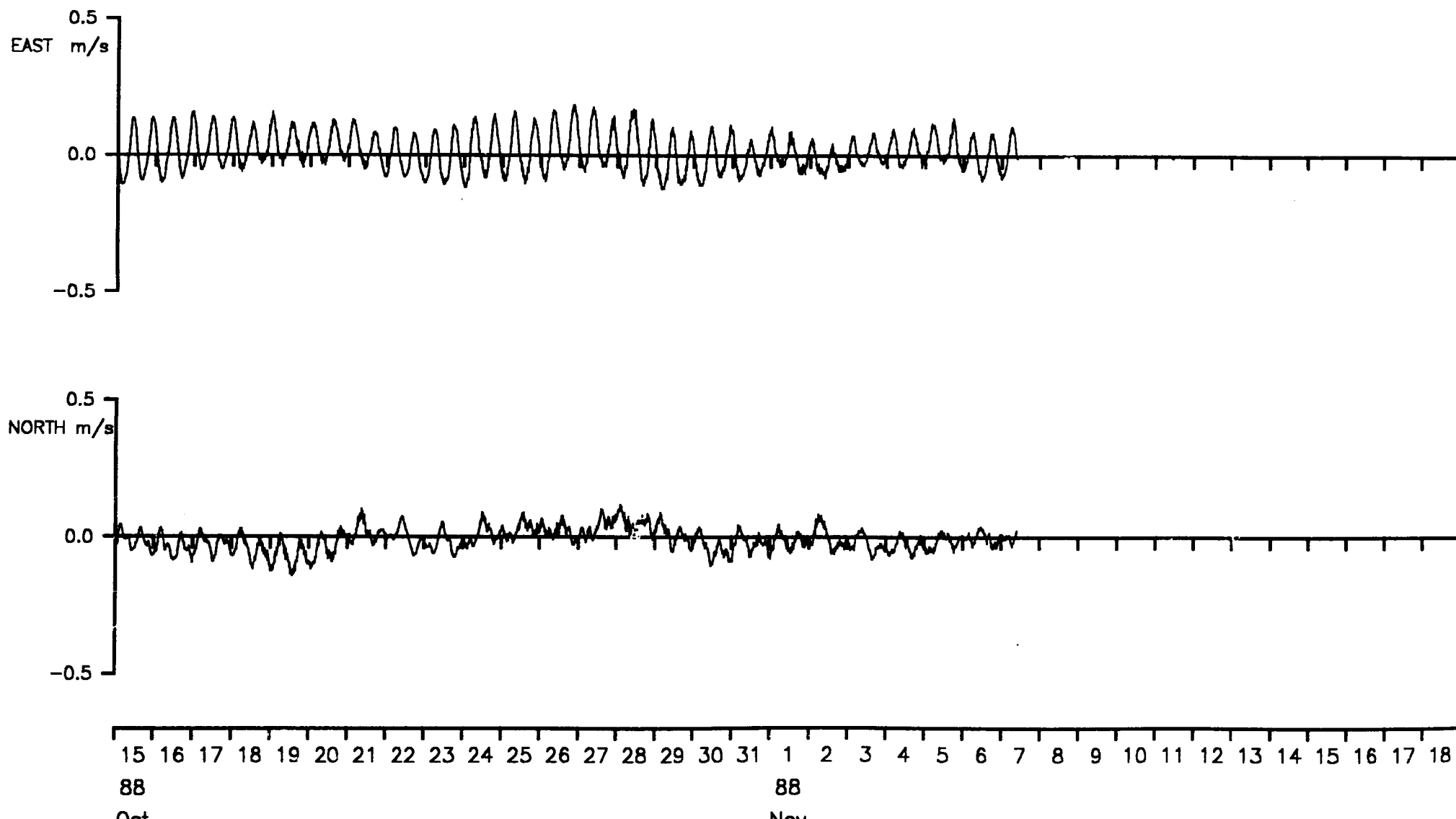


VELOCITY COMPONENT TIME SERIES PLOT

Meter no. 1119 Rig no. C35BC Depth of water(m) 52.0

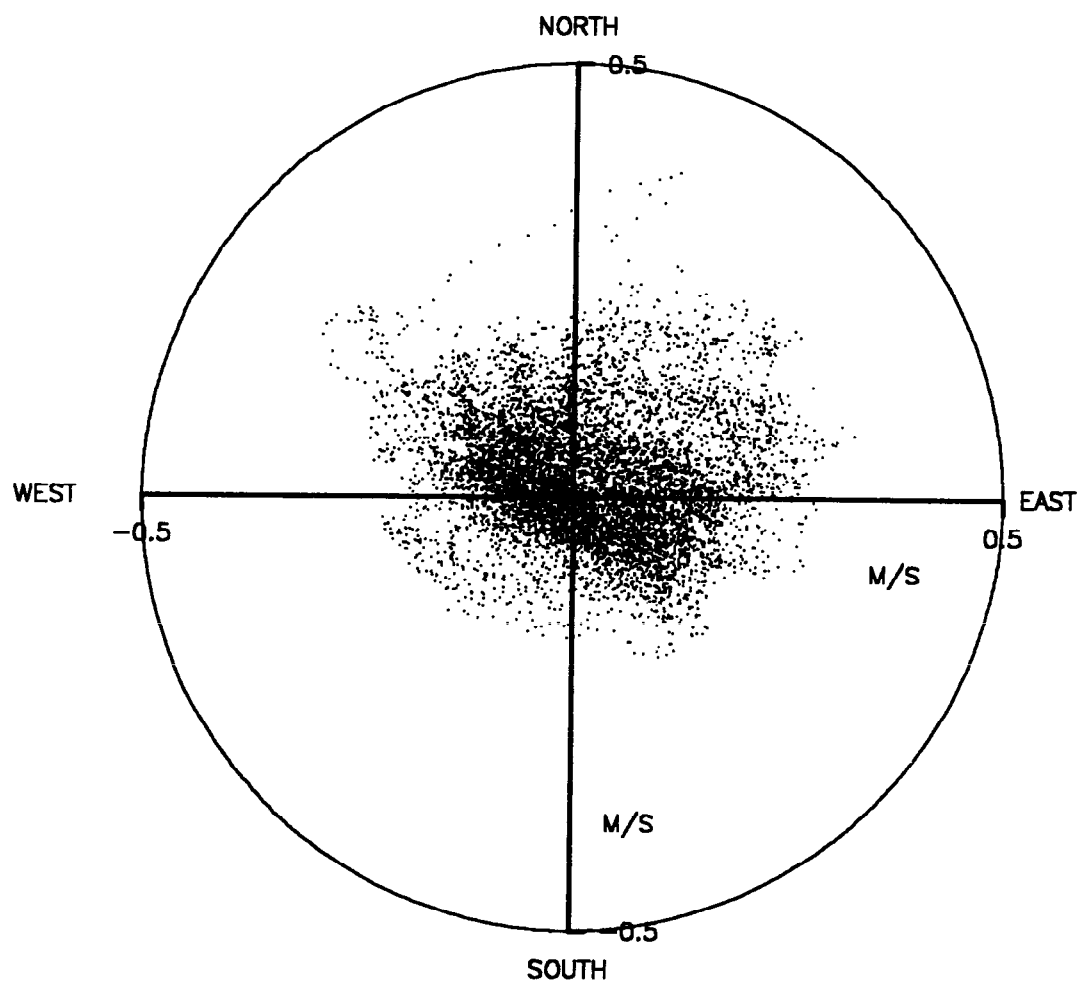
Start/End 1988/09/10 AT 00:11:00 1988/11/07 AT 10:00:00

Position 55 29.90N 05 30.40E Meter Height(m) 27.0



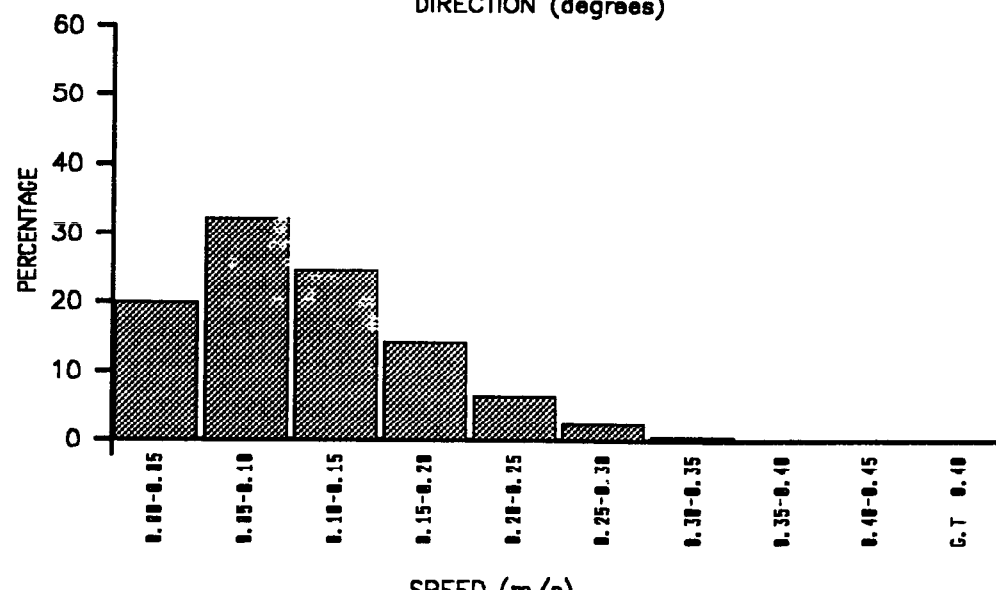
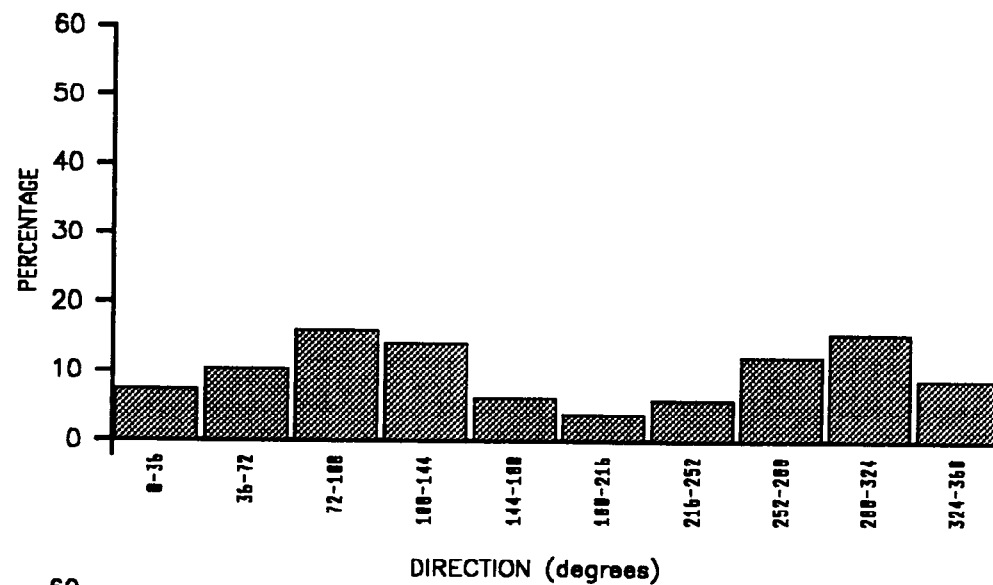
SCATTER PLOT

Meter no. 1119 Rig no. C35BC Depth of water(m) 52.0
 Start/End 1988/09/10 AT 00:11:00 1988/11/07 AT 10:00:00
 Position 55 29.90N 05 30.40E Meter Height(m) 27.0



HISTOGRAMS FOR SPEEDS AND DIRECTIONS

Meter no. 1119 Rig no. C35BC Depth of water(m) 52.0
 Start/End 1988/09/10 AT 00:11:00 1988/11/07 AT 10:00:00
 Position 55 29.90N 05 30.40E Meter Height(m) 27.0

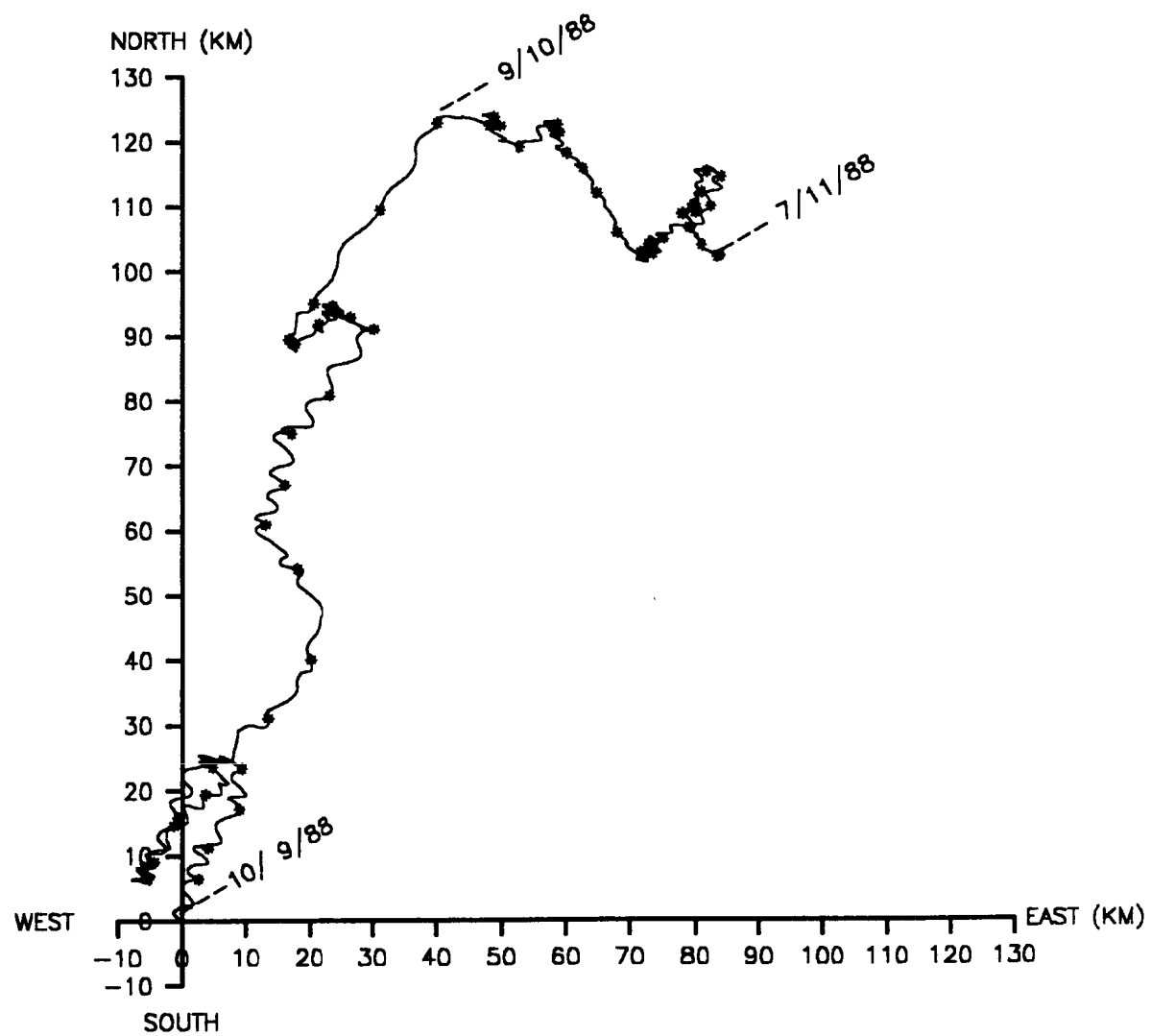


VECTOR PLOT

Meter no. 1119 Rig no. C35BC Depth of water(m) 52.0

Start/End 1988/09/10 AT 00:11:00 1988/11/07 AT 10:00:00

Position 55 29.90N 05 30.40E Meter Height(m) 27.0



STATISTICS FOR S41119MT C35BCS A

	Mean	Variance	Standard deviation
Eastings	0.0168	0.97010098E-02	0.98493695E-01
Northings	0.0202	0.51370561E-02	0.71673274E-01
Speed	0.1068	0.40966906E-02	0.64005375E-01

Vector mean speed 0.0263
Vector Mean Direction 39.7

Maximum ten values									
Eastings					Northings				
0.327	0.312	0.307	0.305	0.301	0.374	0.370	0.367	0.362	0.354
0.291	0.290	0.289	0.283	0.283	0.351	0.339	0.330	0.322	0.313

Minimum ten values									
Eastings					Northings				
-0.254	-0.262	-0.263	-0.273	-0.277	-0.167	-0.169	-0.169	-0.171	-0.176
-0.280	-0.282	-0.282	-0.288	-0.291	-0.177	-0.179	-0.180	-0.181	-0.183

Maximum speeds									
0.394	0.386	0.380	0.370	0.361	0.356	0.355	0.350	0.347	0.346
0.346	0.335	0.332	0.331	0.330	0.329	0.327	0.326	0.324	0.323
0.323	0.322	0.321	0.321	0.320	0.319	0.317	0.315	0.314	0.314
0.314	0.313	0.311	0.310	0.310	0.310	0.309	0.308	0.308	0.307
0.306	0.306	0.306	0.306	0.305	0.303	0.303	0.302	0.301	0.300
0.299	0.298	0.298	0.298	0.298	0.298	0.297	0.296	0.296	0.296
0.296	0.294	0.294	0.294	0.294	0.293	0.293	0.293	0.293	0.292
0.292	0.292	0.292	0.291	0.291	0.290	0.290	0.289	0.289	0.288
0.288	0.288	0.288	0.288	0.287	0.287	0.287	0.287	0.286	0.286
0.286	0.286	0.285	0.284	0.284	0.284	0.283	0.283	0.283	0.283

Variance ellipse statistics

Maximum variance 0.9873E-02	Direction -79.2
Minimum variance 0.4964E-02	Direction 10.8
Total variance 0.1484E-01	Ratio of variances 0.5028E+00
Average direction. maxdir -PI/2 to maxdir +PI/2	32.8
Average direction. maxdir +PI/2 to maxdir -PI/2	175.1

STATISTICS FOR S41119MT C35BCSF A

	Mean	Variance	Standard deviation
Eastings	0.0161	0.19452802E-02	0.44105329E-01
Northings	0.0198	0.36212325E-02	0.60176674E-01
Speed	0.0637	0.21524474E-02	0.46394479E-01

Vector mean speed 0.0256
 Vector Mean Direction 39.1

Maximum ten values									
Eastings					Northings				
0.141	0.140	0.127	0.125	0.117	0.200	0.192	0.190	0.172	0.169
0.112	0.106	0.105	0.103	0.102	0.163	0.162	0.159	0.138	0.137

Minimum ten values									
Eastings					Northings				
-0.061	-0.063	-0.064	-0.064	-0.071	-0.068	-0.072	-0.075	-0.076	-0.078
-0.071	-0.073	-0.073	-0.079	-0.080	-0.089	-0.096	-0.107	-0.109	-0.113

Maximum speeds									
0.244	0.238	0.228	0.211	0.193	0.172	0.171	0.168	0.167	0.162
0.159	0.152	0.149	0.148	0.145	0.145	0.144	0.137	0.134	0.134
0.133	0.132	0.130	0.121	0.117	0.116	0.116	0.112	0.109	0.108
0.106	0.105	0.104	0.103	0.102	0.101	0.099	0.099	0.098	0.096
0.096	0.095	0.095	0.093	0.092	0.091	0.090	0.089	0.088	0.088
0.087	0.087	0.085	0.084	0.084	0.084	0.083	0.081	0.079	0.078
0.078	0.077	0.077	0.076	0.076	0.075	0.075	0.075	0.075	0.075
0.075	0.072	0.071	0.071	0.070	0.070	0.070	0.068	0.068	0.067
0.067	0.065	0.065	0.064	0.063	0.063	0.063	0.062	0.062	0.061
0.060	0.060	0.059	0.059	0.059	0.058	0.057	0.057	0.057	0.056

Variance ellipse statistics

Maximum variance 0.4280E-02	Direction	28.0
Minimum variance 0.1286E-02	Direction	118.0
Total variance 0.5567E-02	Ratio of variances	0.3005E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		1.9
Average direction. maxdir +PI/2 to maxdir -PI/2		169.6

Meter information details for 1118

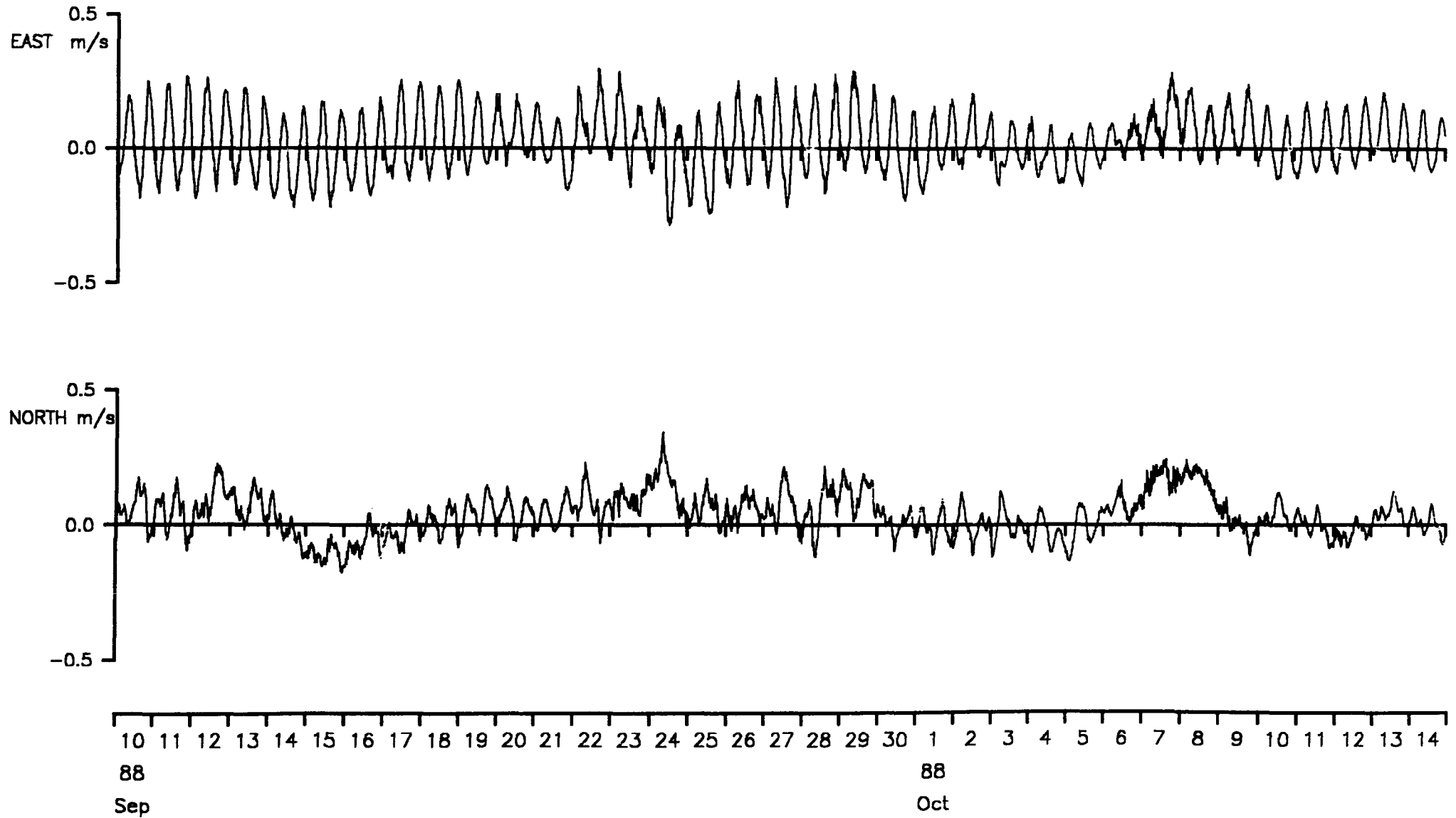
Rig No	:	C35BC
Meter No	:	1118
Recording interval	:	600.0 seconds
Meter height from bottom	:	15.0 m
Position of meter on rig	:	MB
Meter type	:	S4
Meter started	:	09-SEPT-88 22:00:00
Meter stopped	:	07-NOV-88 14:30:00
Period switched on	:	58.7 days
Period of good data	:	58.4 days
Total number of scans	:	8411
Timing error	:	None
Comments	:	Good record obtained

VELOCITY COMPONENT TIME SERIES PLOT

Meter no. 1118 Rig no. C35BC Depth of water(m) 52.0

Start/End 1988/09/10 AT 00:11:00 1988/11/07 AT 10:00:00

Position 55 29.90N 05 30.40E Meter Height(m) 15.0

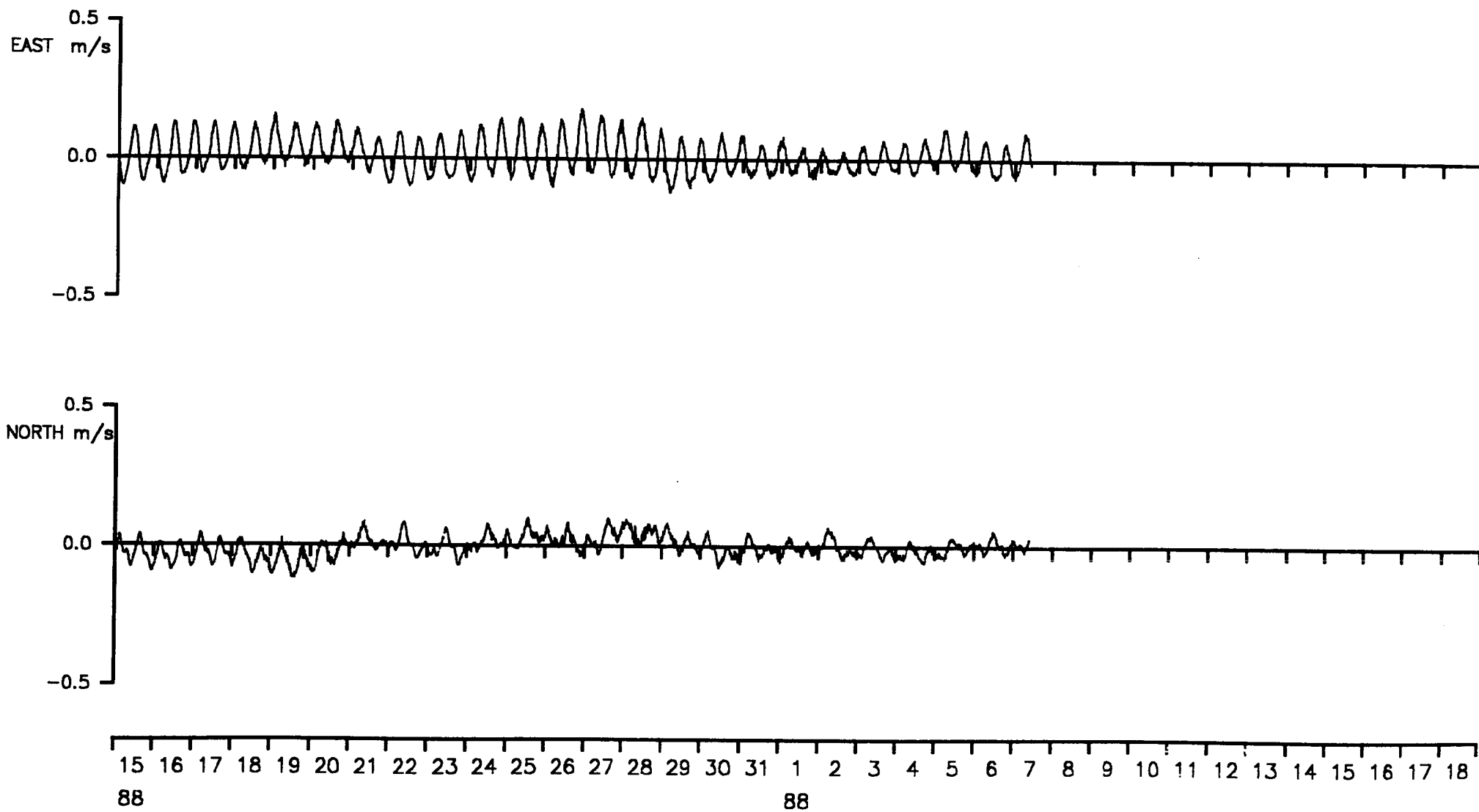


VELOCITY COMPONENT TIME SERIES PLOT

Meter no. 1118 Rig no. C35BC Depth of water(m) 52.0

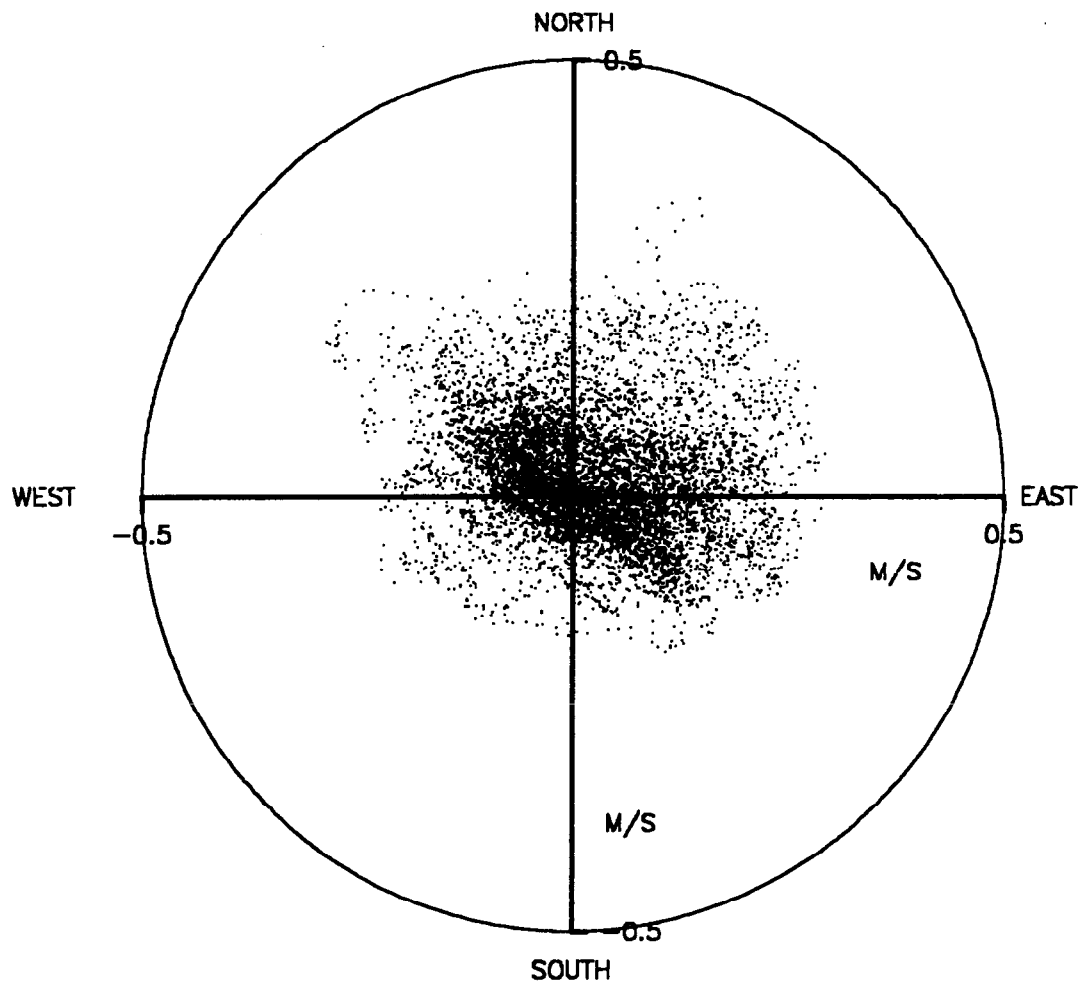
Start/End 1988/09/10 AT 00:11:00 1988/11/07 AT 10:00:00

Position 55 29.90N 05 30.40E Meter Height(m) 15.0



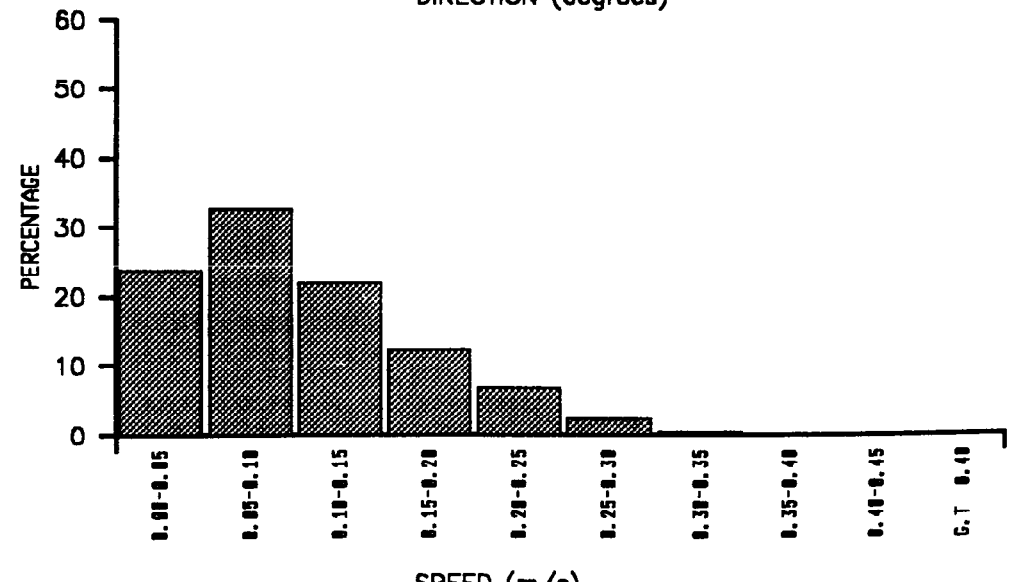
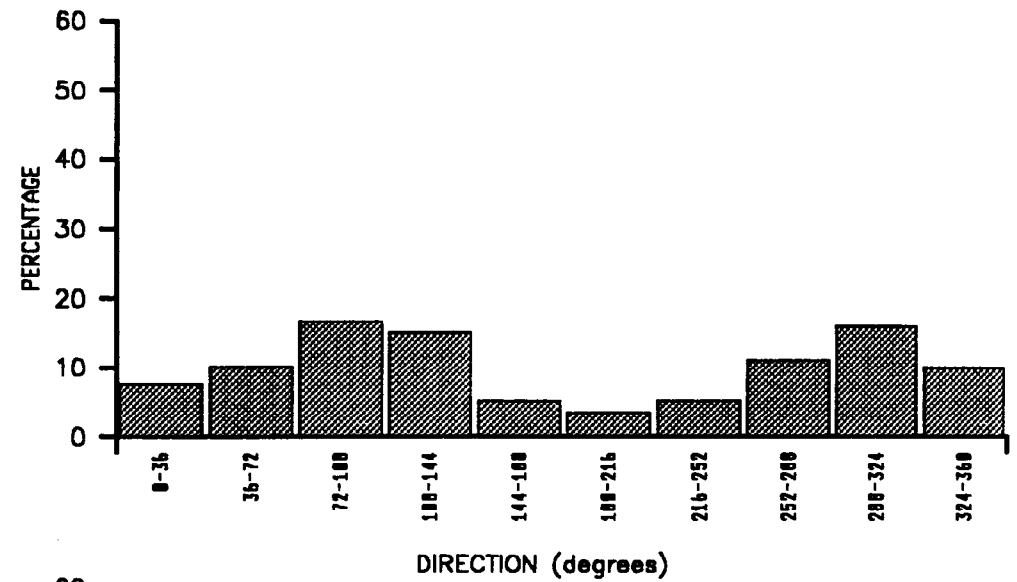
SCATTER PLOT

Meter no. 1118 Rig no. C35BC Depth of water(m) 52.0
 Start/End 1988/09/10 AT 00:11:00 1988/11/07 AT 10:00:00
 Position 55 29.90N 05 30.40E Meter Height(m) 15.0



HISTOGRAMS FOR SPEEDS AND DIRECTIONS

Meter no. 1118 Rig no. C35BC Depth of water(m) 52.0
 Start/End 1988/09/10 AT 00:11:00 1988/11/07 AT 10:00:00
 Position 55 29.90N 05 30.40E Meter Height(m) 15.0

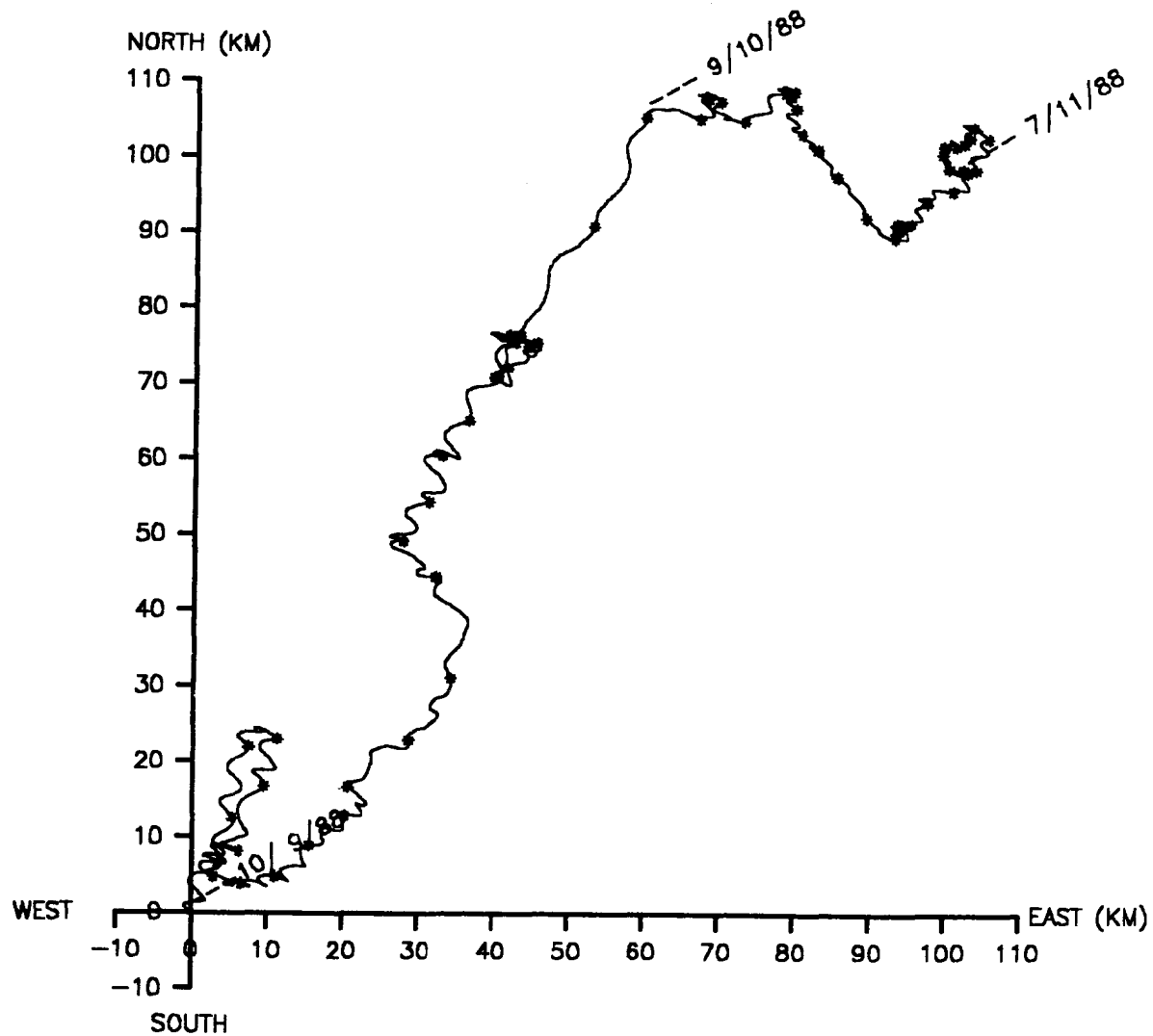


VECTOR PLOT

Meter no. 1118 Rig no. C35BC Depth of water(m) 52.0

Start/End 1988/09/10 AT 00:11:00 1988/11/07 AT 10:00:00

Position 55 29.90N 05 30.40E Meter Height(m) 15.0



STATISTICS FOR S41118MB C35BCS A

	Mean	Variance	Standard deviation
Eastings	0.0204	0.88766590E-02	0.94215989E-01
Northings	0.0196	0.48143193E-02	0.69385290E-01
Speed	0.1014	0.41831881E-02	0.64677536E-01

Vector mean speed 0.0283
Vector Mean Direction 46.2

Maximum ten values									
Eastings					Northings				
0.294	0.289	0.286	0.284	0.284	0.342	0.336	0.331	0.322	0.317
0.283	0.282	0.282	0.282	0.277	0.308	0.304	0.293	0.285	0.275

Minimum ten values									
Eastings					Northings				
-0.270	-0.271	-0.271	-0.273	-0.273	-0.163	-0.166	-0.167	-0.168	-0.170
-0.274	-0.275	-0.276	-0.281	-0.285	-0.172	-0.173	-0.173	-0.175	-0.179

Maximum speeds									
0.372	0.355	0.355	0.345	0.343	0.342	0.337	0.337	0.337	0.335
0.331	0.329	0.328	0.328	0.327	0.325	0.323	0.322	0.322	0.316
0.316	0.311	0.311	0.311	0.308	0.307	0.305	0.305	0.303	0.302
0.301	0.298	0.298	0.298	0.295	0.294	0.294	0.294	0.293	0.293
0.293	0.293	0.292	0.292	0.292	0.292	0.291	0.289	0.289	0.289
0.289	0.289	0.289	0.289	0.289	0.288	0.288	0.288	0.287	0.287
0.287	0.286	0.285	0.285	0.284	0.284	0.284	0.284	0.284	0.284
0.283	0.283	0.283	0.282	0.281	0.280	0.280	0.280	0.280	0.279
0.279	0.279	0.279	0.278	0.278	0.278	0.277	0.277	0.277	0.276
0.276	0.276	0.276	0.275	0.275	0.274	0.274	0.274	0.273	0.273

Variance ellipse statistics

Maximum variance 0.9179E-02	Direction -75.2
Minimum variance 0.4510E-02	Direction 14.8
Total variance 0.1369E-01	Ratio of variances 0.4914E+00
Average direction. maxdir -PI/2 to maxdir +PI/2	31.4
Average direction. maxdir +PI/2 to maxdir -PI/2	172.3

STATISTICS FOR S41118MB C35BCSF A

	Mean	Variance	Standard deviation
Eastings	0.0203	0.13673294E-02	0.36977414E-01
Northings	0.0188	0.33227110E-02	0.57642963E-01
Speed	0.0589	0.19685316E-02	0.44368140E-01

Vector mean speed 0.0276
Vector Mean Direction 47.2

Maximum ten values									
Eastings					Northings				
0.129	0.126	0.114	0.106	0.103	0.203	0.198	0.192	0.174	0.173
0.103	0.089	0.089	0.084	0.082	0.169	0.161	0.159	0.139	0.135

Minimum ten values									
Eastings					Northings				
-0.038	-0.039	-0.041	-0.045	-0.046	-0.063	-0.065	-0.066	-0.066	-0.084
-0.046	-0.060	-0.060	-0.076	-0.076	-0.088	-0.103	-0.111	-0.117	-0.121

Maximum speeds									
0.239	0.231	0.224	0.204	0.191	0.173	0.165	0.163	0.162	0.156
0.151	0.146	0.139	0.139	0.135	0.125	0.124	0.123	0.122	0.120
0.120	0.119	0.117	0.116	0.115	0.115	0.113	0.107	0.106	0.099
0.099	0.097	0.096	0.096	0.093	0.088	0.088	0.088	0.085	0.084
0.084	0.083	0.083	0.083	0.082	0.081	0.080	0.080	0.079	0.079
0.079	0.078	0.078	0.076	0.076	0.075	0.075	0.074	0.074	0.072
0.072	0.071	0.070	0.070	0.070	0.070	0.069	0.066	0.066	0.066
0.064	0.064	0.064	0.063	0.063	0.062	0.062	0.062	0.059	0.059
0.058	0.058	0.057	0.057	0.056	0.056	0.056	0.056	0.056	0.056
0.055	0.055	0.055	0.054	0.054	0.054	0.054	0.054	0.053	0.051

Variance ellipse statistics

Maximum variance 0.3691E-02	Direction	21.7
Minimum variance 0.9989E-03	Direction	111.7
Total variance 0.4690E-02	Ratio of variances	0.2706E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		13.5
Average direction. maxdir +PI/2 to maxdir -PI/2		170.9

Meter information details for 9069

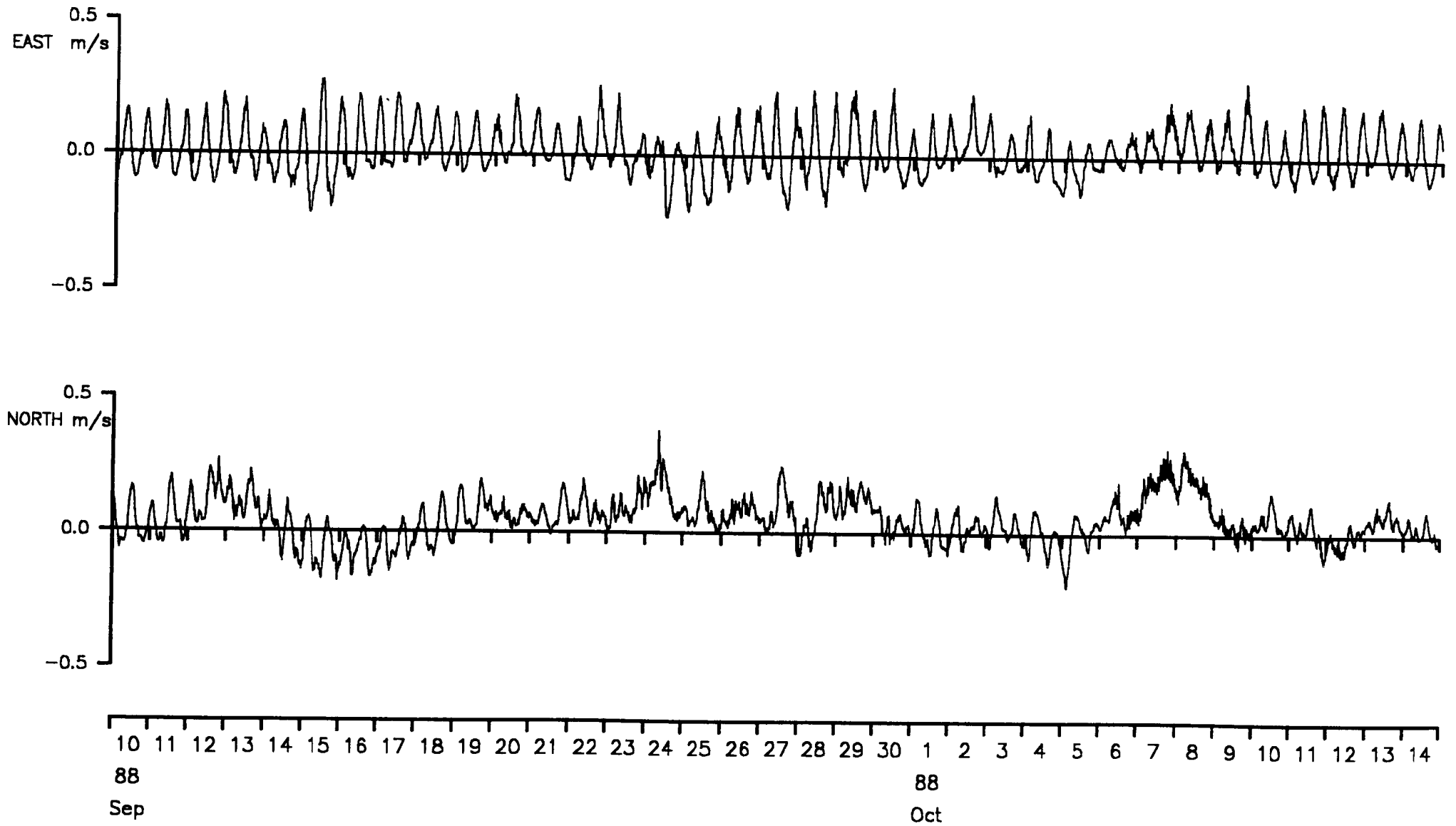
Rig No	:	C35BC
Meter No	:	9069
Recording interval	:	600.0 seconds
Meter height from bottom	:	7.0 m
Position of meter on rig	:	B
Meter type	:	AS
Meter started	:	09-SEPT-88 22:10:00
Time of last valid scan	:	20-OCT-88 23:50:00 N/E components
Time of last valid scan	:	07-NOV-88 15:40:00 T/C/P parameters
Period of good data	:	41.0 days short record for N/E
Period of good data	:	58.4 days for T/C/P
Timing error	:	None
Comments	:	Spikes present in parameter data and temperature values are a few degrees higher than CTD cast comparisons
		Pressure sensor indicates instability throughout deployment

VELOCITY COMPONENT TIME SERIES PLOT

Meter no. 9069 Rig no. C35BC Depth of water(m) 52.0

Start/End 1988/09/10 AT 00:11:00 1988/11/07 AT 10:00:00

Position 55 29.90N 05 30.40E Meter Height(m) 7.0

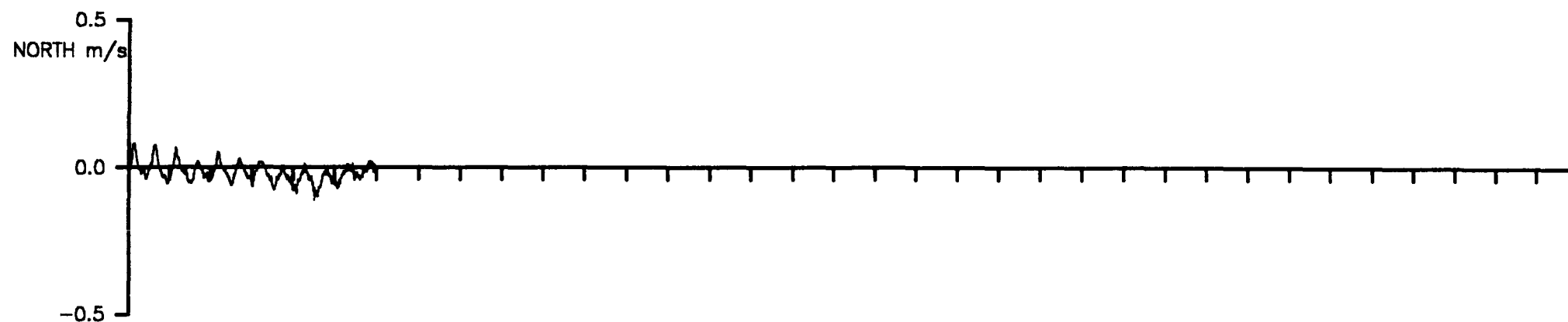
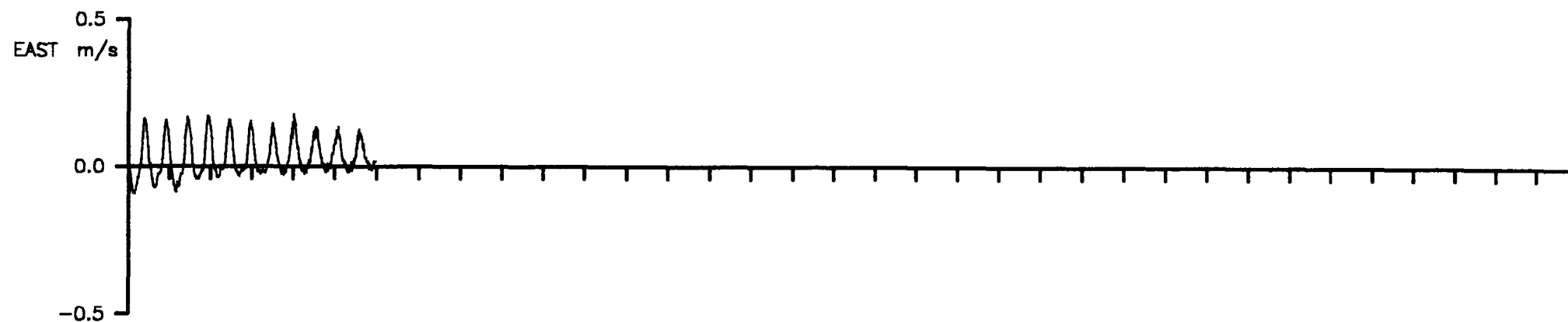


VELOCITY COMPONENT TIME SERIES PLOT

Meter no. 9069 Rig no. C35BC Depth of water(m) 52.0

Start/End 1988/09/10 AT 00:11:00 1988/11/07 AT 10:00:00

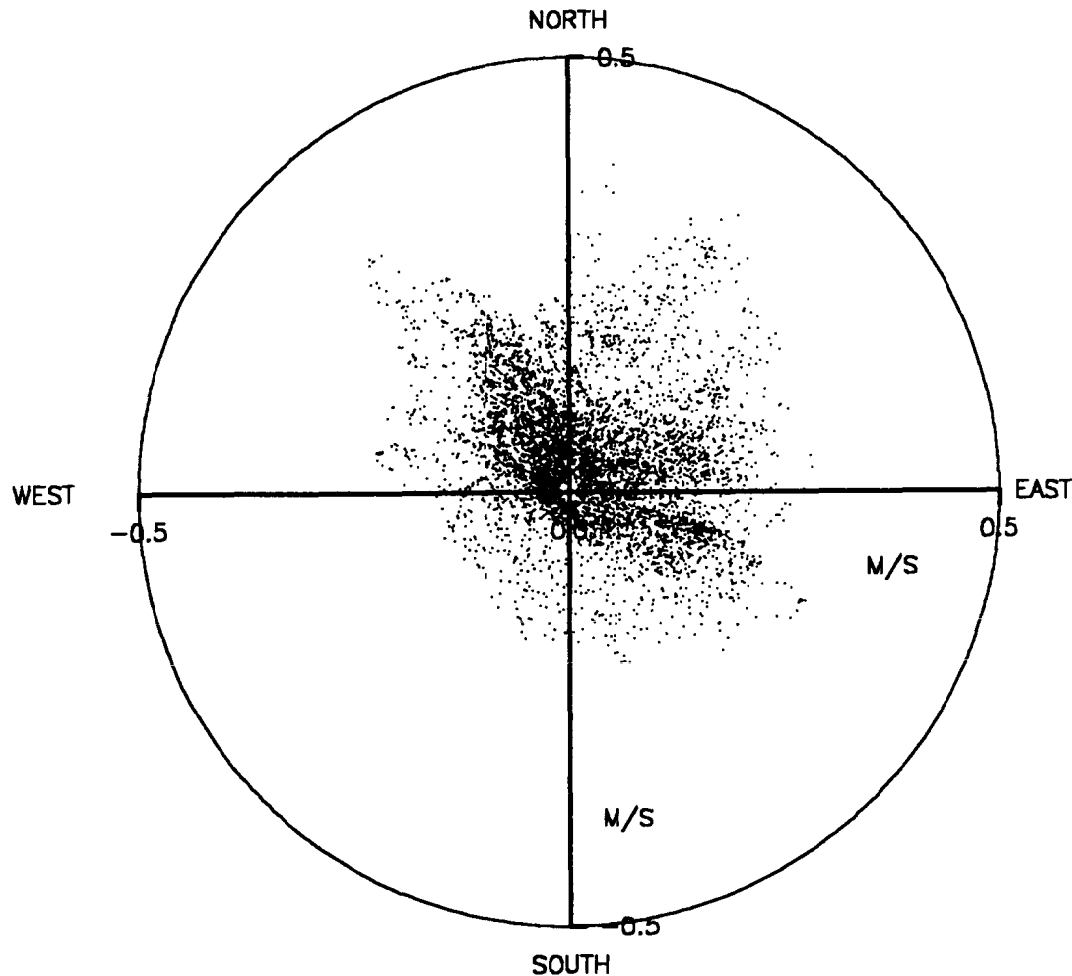
Position 55 29.90N 05 30.40E Meter Height(m) 7.0



15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
88 88
Oct Nov

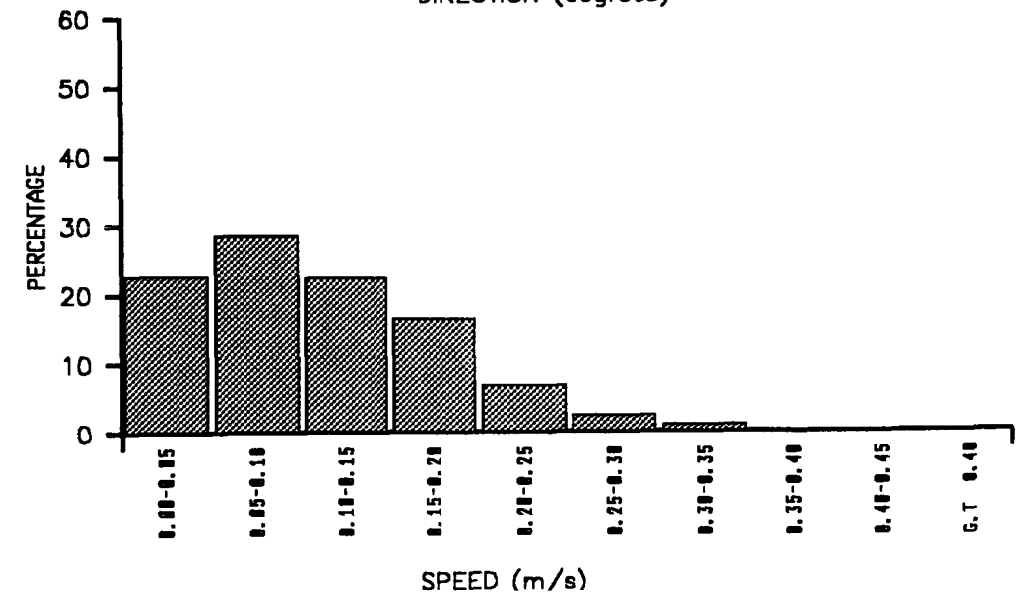
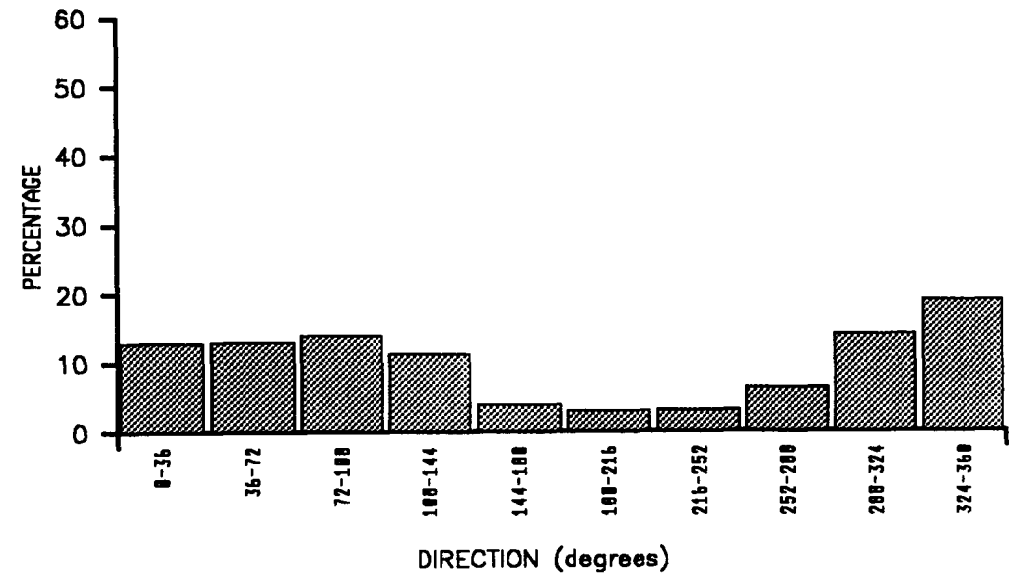
SCATTER PLOT

Meter no. 9069 Rig no. C35BC Depth of water(m) 52.0
 Start/End 1988/09/10 AT 00:11:00 1988/11/07 AT 10:00:00
 Position 55 29.90N 05 30.40E Meter Height(m) 7.0



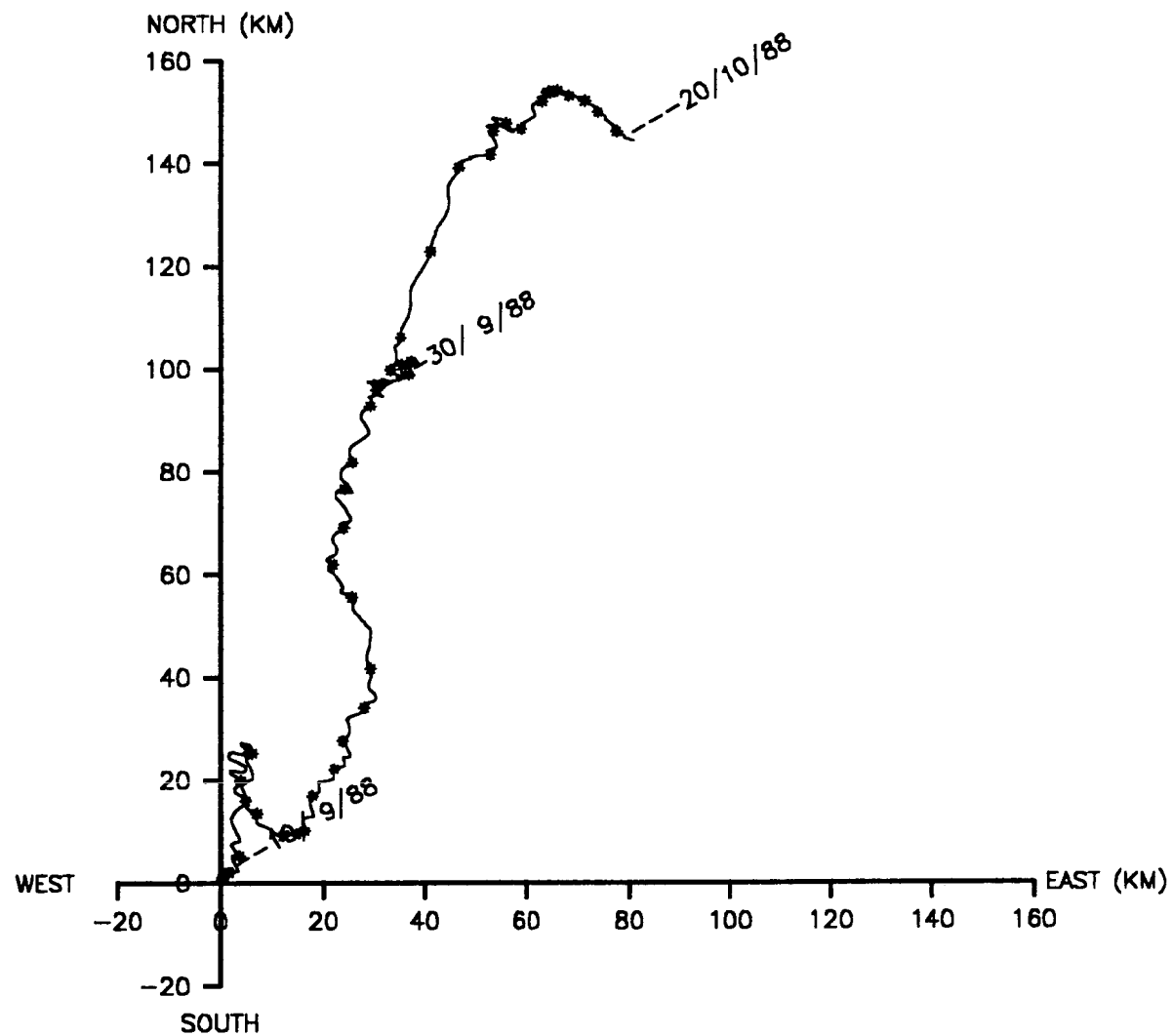
HISTOGRAMS FOR SPEEDS AND DIRECTIONS

Meter no. 9069 Rig no. C35BC Depth of water(m) 52.0
 Start/End 1988/09/10 AT 00:11:00 1988/11/07 AT 10:00:00
 Position 55 29.90N 05 30.40E Meter Height(m) 7.0



VECTOR PLOT

Meter no. 9069 Rig no. C35BC Depth of water(m) 52.0
Start/End 1988/09/10 AT 00:11:00 1988/11/07 AT 10:00:00
Position 55 29.90N 05 30.40E Meter Height(m) 7.0

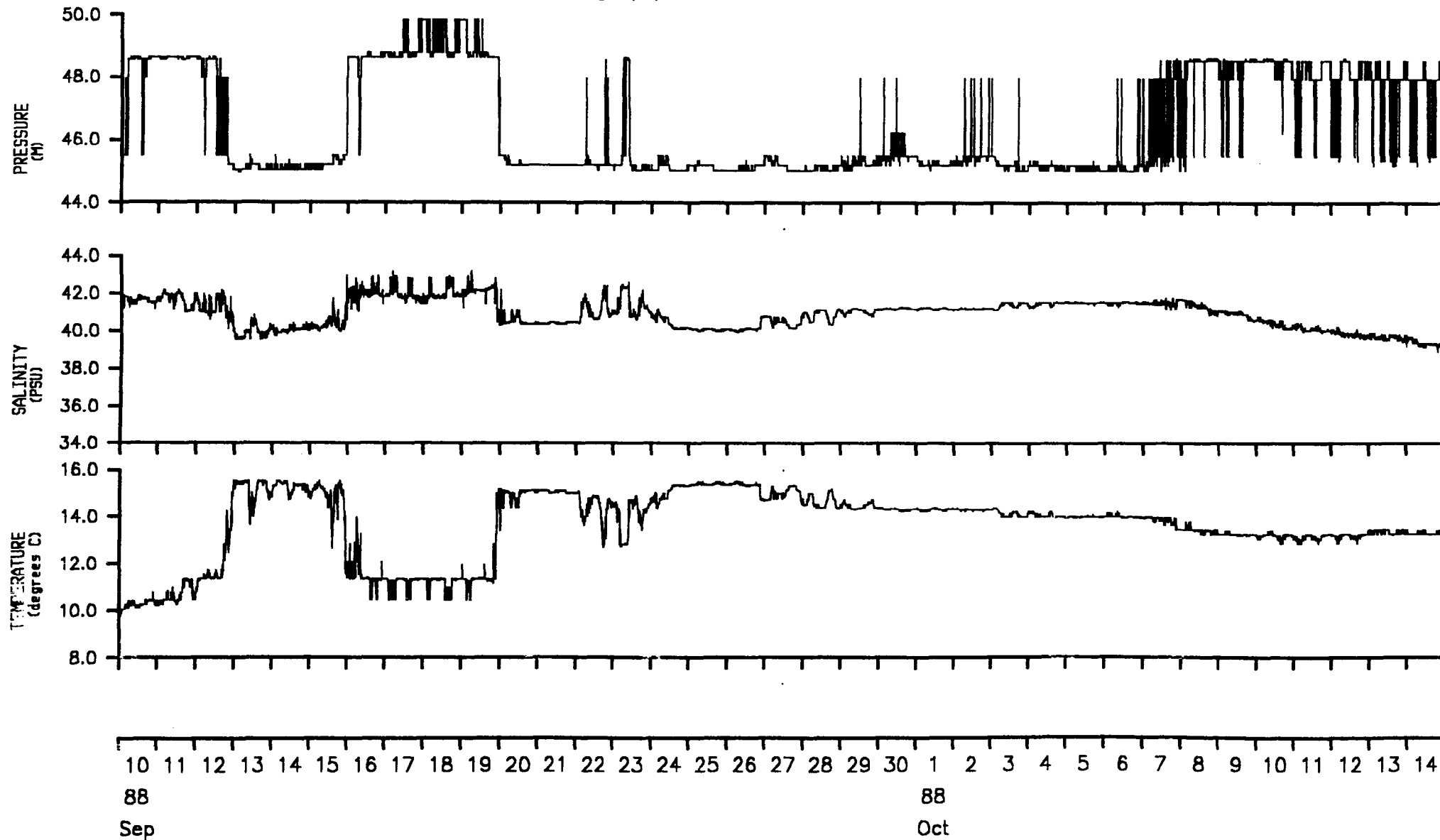


TEMPERATURE, SALINITY AND PRESSURE TIME SERIES PLOTS

Meter no. 9069 Rig no. C35BC Depth of water(m) 52.0

Start/End 1988/09/10 AT 00:11:00 1988/11/07 AT 10:00:00

Position 55 29.90N 05 30.40E Meter Height(m) 7.0

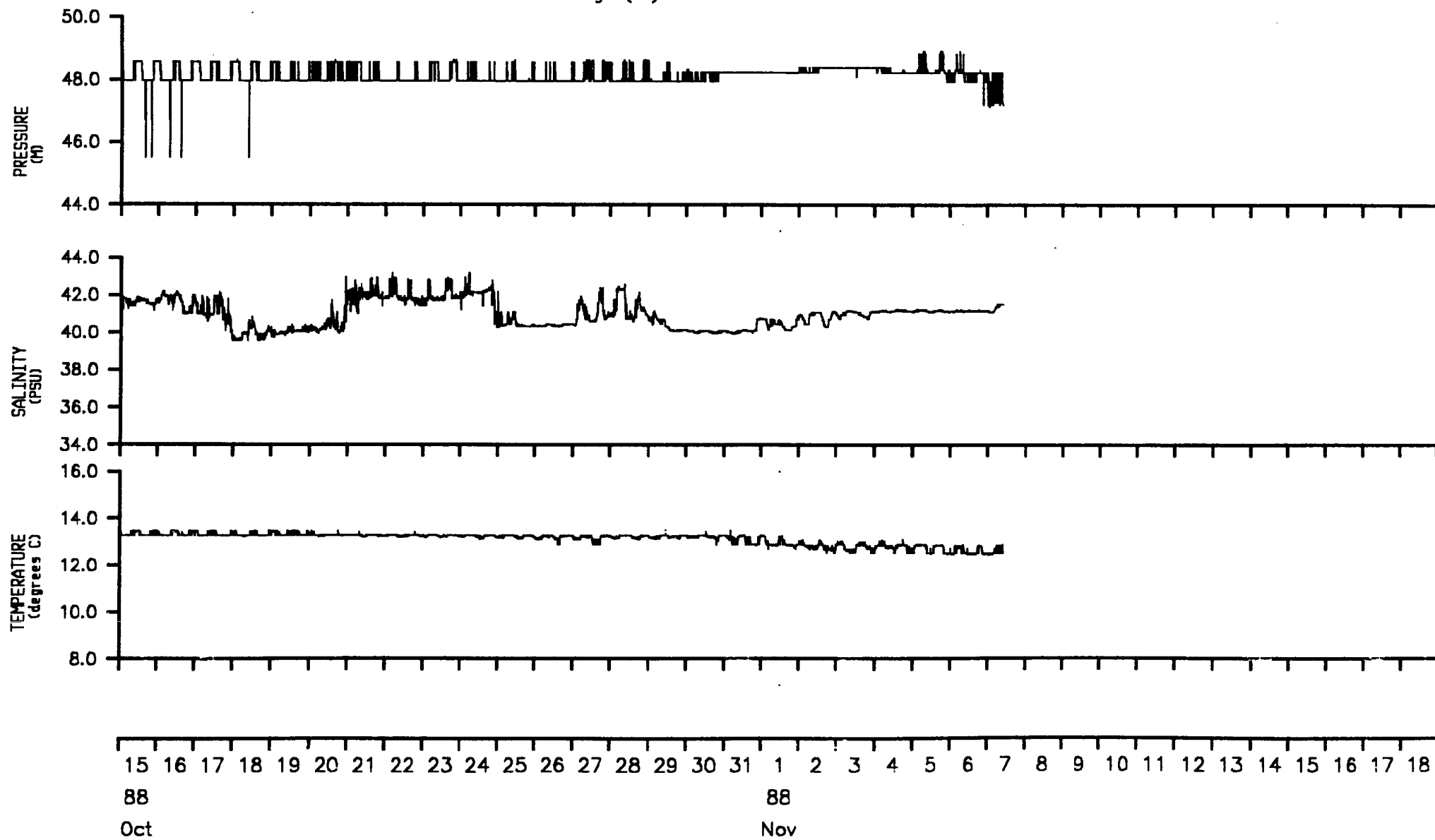


TEMPERATURE, SALINITY AND PRESSURE TIME SERIES PLOTS

Meter no. 9069 Rig no. C35BC Depth of water(m) 52.0

Start/End 1988/09/10 AT 00:11:00 1988/11/07 AT 10:00:00

Position 55 29.90N 05 30.40E Meter Height(m) 7.0



STATISTICS FOR AS9069B C35BCS A

	Mean	Variance	Standard deviation
Eastings	0.0229	0.76111630E-02	0.87241948E-01
Northings	0.0409	0.65445676E-02	0.80898464E-01
Speed	0.1089	0.44946745E-02	0.67042291E-01

Vector mean speed 0.0468
 Vector Mean Direction 29.3

Maximum ten values									
Eastings					Northings				
0.283	0.281	0.274	0.273	0.270	0.376	0.351	0.345	0.344	0.317
0.270	0.268	0.267	0.266	0.265	0.314	0.312	0.307	0.296	0.296

Minimum ten values									
Eastings					Northings				
-0.219	-0.219	-0.220	-0.221	-0.221	-0.173	-0.174	-0.177	-0.183	-0.186
-0.224	-0.226	-0.228	-0.230	-0.231	-0.187	-0.189	-0.195	-0.196	-0.196

Maximum speeds									
0.380	0.374	0.360	0.354	0.354	0.348	0.348	0.348	0.348	0.348
0.345	0.345	0.339	0.339	0.339	0.334	0.331	0.328	0.328	0.328
0.328	0.328	0.325	0.325	0.325	0.325	0.325	0.322	0.322	0.322
0.322	0.322	0.322	0.322	0.319	0.319	0.319	0.319	0.319	0.316
0.316	0.316	0.313	0.313	0.310	0.310	0.310	0.307	0.307	0.307
0.305	0.305	0.305	0.305	0.302	0.302	0.302	0.302	0.302	0.299
0.299	0.299	0.299	0.299	0.299	0.296	0.296	0.296	0.296	0.296
0.296	0.296	0.296	0.296	0.296	0.296	0.293	0.293	0.293	0.293
0.290	0.290	0.290	0.290	0.287	0.287	0.287	0.287	0.287	0.287
0.287	0.287	0.284	0.284	0.284	0.284	0.284	0.284	0.284	0.284

Variance ellipse statistics

Maximum variance 0.8958E-02	Direction	-53.2
Minimum variance 0.5196E-02	Direction	36.8
Total variance 0.1415E-01	Ratio of variances	0.5801E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		29.7
Average direction. maxdir +PI/2 to maxdir -PI/2		154.8

STATISTICS FOR AS9069B C35BCSF A

	Mean	Variance	Standard deviation
Eastings	0.0223	0.10624917E-02	0.32595880E-01
Northings	0.0458	0.42674504E-02	0.65325737E-01
Speed	0.0753	0.22282209E-02	0.47204036E-01

Vector mean speed 0.0509
Vector Mean Direction 25.9

Maximum ten values									
Eastings					Northings				
0.087	0.084	0.079	0.073	0.070	0.243	0.232	0.229	0.198	0.195
0.070	0.070	0.070	0.068	0.067	0.180	0.170	0.163	0.153	0.146

Minimum ten values									
Eastings					Northings				
-0.036	-0.038	-0.039	-0.048	-0.050	-0.052	-0.064	-0.065	-0.070	-0.071
-0.051	-0.051	-0.060	-0.061	-0.065	-0.071	-0.071	-0.072	-0.072	-0.073

Maximum speeds									
0.258	0.245	0.244	0.208	0.207	0.184	0.177	0.165	0.161	0.155
0.152	0.150	0.149	0.145	0.138	0.130	0.128	0.126	0.122	0.120
0.120	0.104	0.099	0.098	0.096	0.095	0.094	0.092	0.092	0.091
0.090	0.090	0.090	0.090	0.089	0.088	0.088	0.088	0.087	0.086
0.086	0.085	0.084	0.083	0.082	0.082	0.082	0.082	0.081	0.081
0.080	0.080	0.077	0.077	0.075	0.075	0.075	0.075	0.074	0.073
0.073	0.073	0.073	0.073	0.072	0.072	0.072	0.071	0.070	0.069
0.069	0.068	0.068	0.067	0.066	0.065	0.065	0.065	0.064	0.064
0.064	0.063	0.062	0.062	0.062	0.060	0.060	0.058	0.057	0.057
0.056	0.055	0.055	0.053	0.052	0.050	0.050	0.049	0.048	0.048

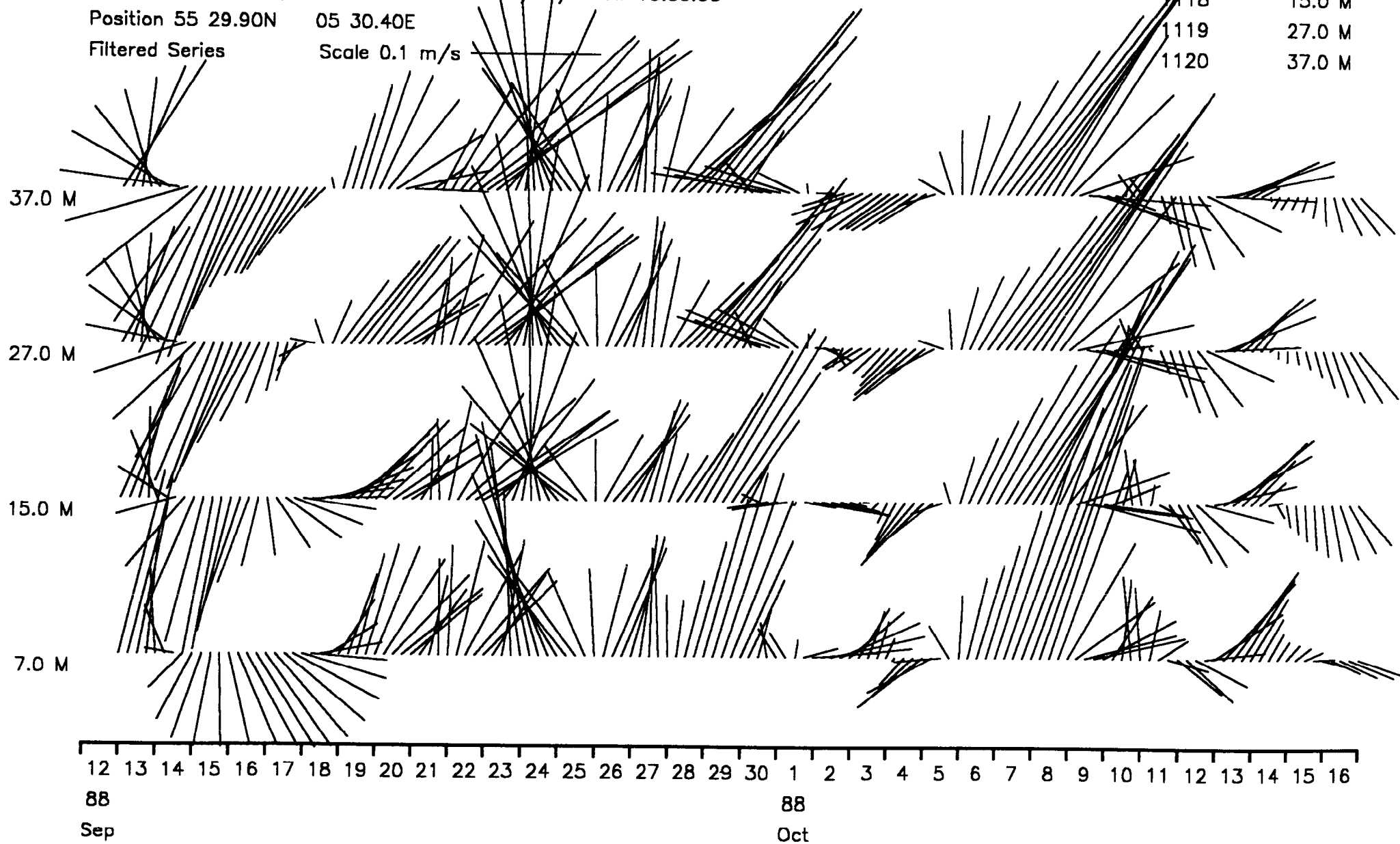
Variance ellipse statistics

Maximum variance 0.4283E-02	Direction	3.9
Minimum variance 0.1047E-02	Direction	93.9
Total variance 0.5330E-02	Ratio of variances	0.2446E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		17.6
Average direction. maxdir +PI/2 to maxdir -PI/2		151.3

STICK TIME SERIES PLOT

Rig no. C35BC Depth of water(m) 52.0
 Start/End 1988/09/10 AT 00:11:00 1988/11/07 AT 10:00:00
 Position 55 29.90N 05 30.40E
 Filtered Series Scale 0.1 m/s

Meter No.	Meter Height
9069	7.0 M
1118	15.0 M
1119	27.0 M
1120	37.0 M



STICK TIME SERIES PLOT

Rig no. C35BC Depth of water(m) 52.0

Start/End 1988/09/10 AT 00:11:00 1988/11/07 AT 10:00:00

Position 55 29.90N 05 30.40E

Filtered Series Scale 0.1 m/s

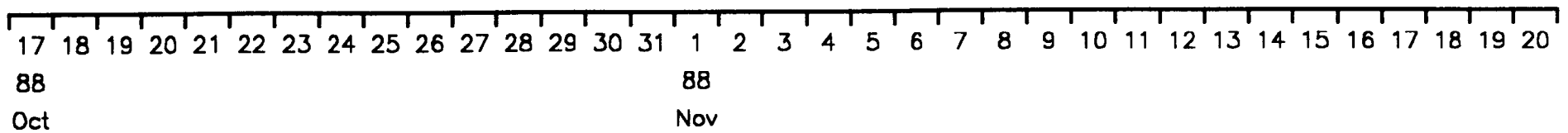
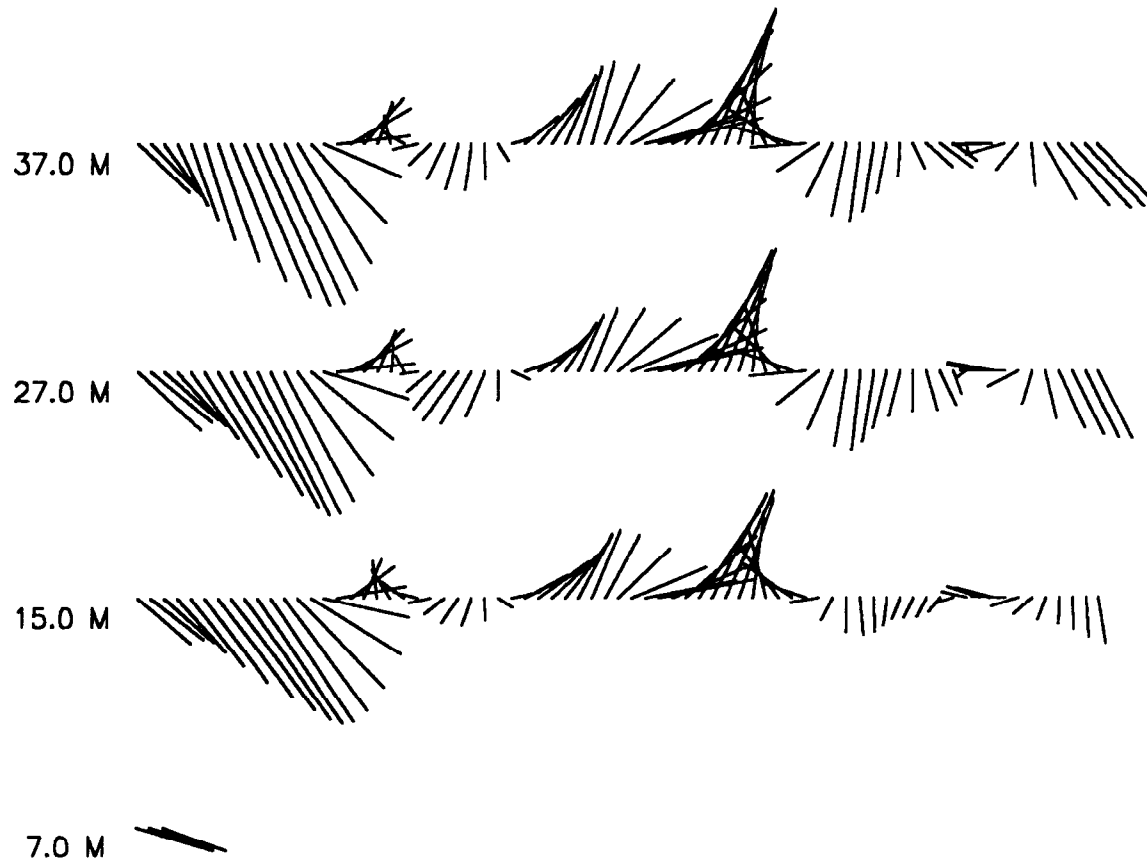
Meter No. Meter Height

9069 7.0 M

1118 15.0 M

1119 27.0 M

1120 37.0 M



Rig information details for C39BC

Position Latitude	:	55 30.24N
Position Longitude	:	05 30.30E
Water depth	:	52.0 m
Deployed on cruise	:	C39
Recovered on cruise	:	LOST
Site name identification	:	B
Comments	:	No sign of rig during 3 hour acoustic and drag search on 10-DEC-88

Rig information details for C51BC

Position Latitude	:	55 30.19N
Position Longitude	:	05 27.96E
Water depth	:	52.0 m
Deployed on cruise	:	C51
Recovered on cruise	:	C53
Site name identification	:	B
Magnetic deviation	:	2.8 degrees west
Rig deployed on	:	03-MAY-89 22:53:00
Rig recovered on	:	01-JUNE-89 15:15:00
Period of deployment	:	28.7 days
Comments	:	Launch and recovery successful

Meter information details for 1265

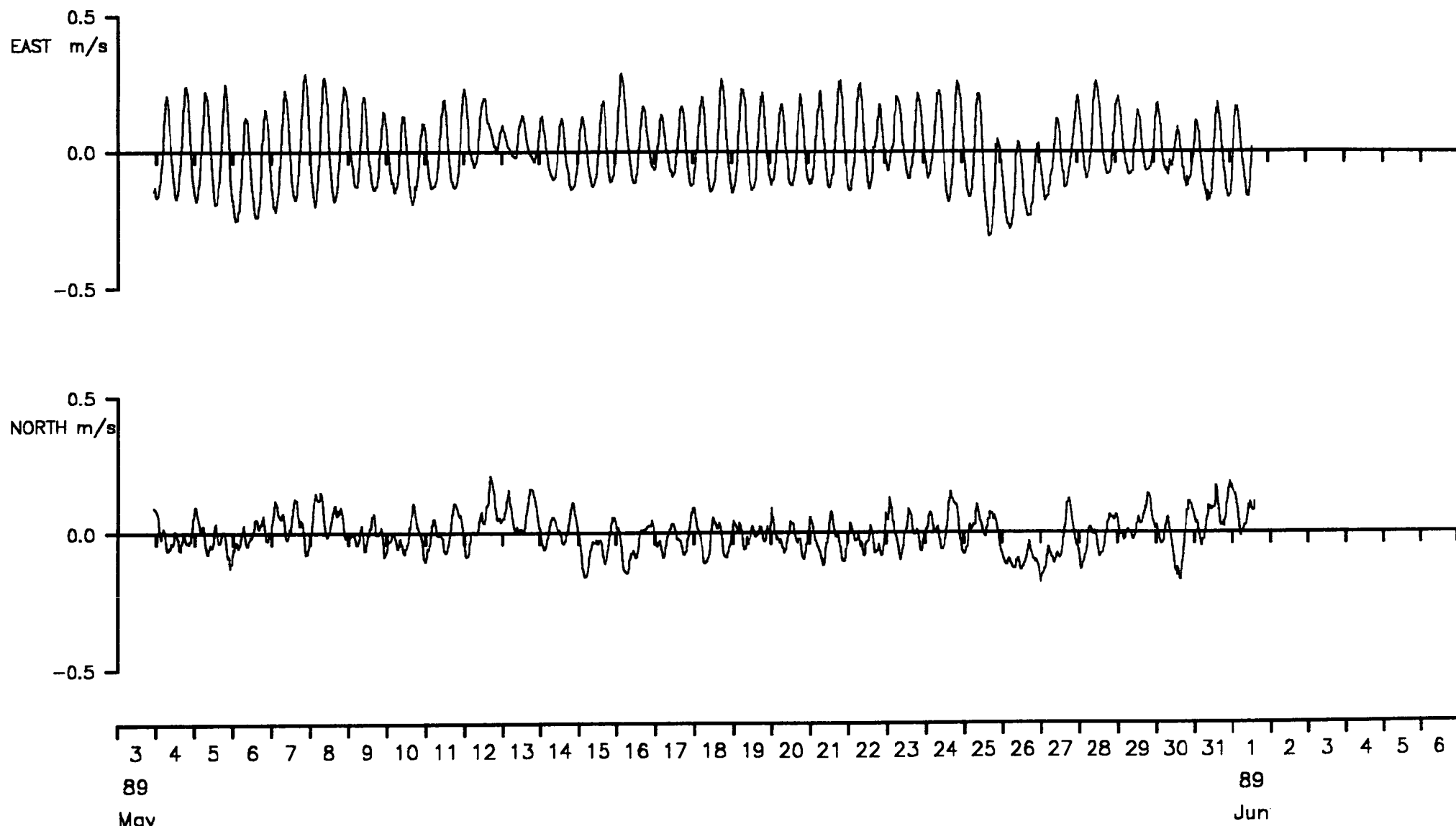
Rig No	:	C51BC
Meter No	:	1265
Recording interval	:	1800.0 seconds
Meter height from bottom	:	37.0 m
Position of meter on rig	:	T
Meter type	:	S4
Meter started	:	03-MAY-89 17:30:00
Meter stopped	:	02-JUNE-89 20:10:00
Period switched on	:	30.1 days
Period of good data	:	28.7 days
Total number of scans	:	1377
Timing error	:	600 seconds slow
Comments	:	Meter set up to sample every 10 minutes every 30 minutes

VELOCITY COMPONENT TIME SERIES PLOT

Meter no. 1265 Rig no. C51BC Depth of water(m) 52.0

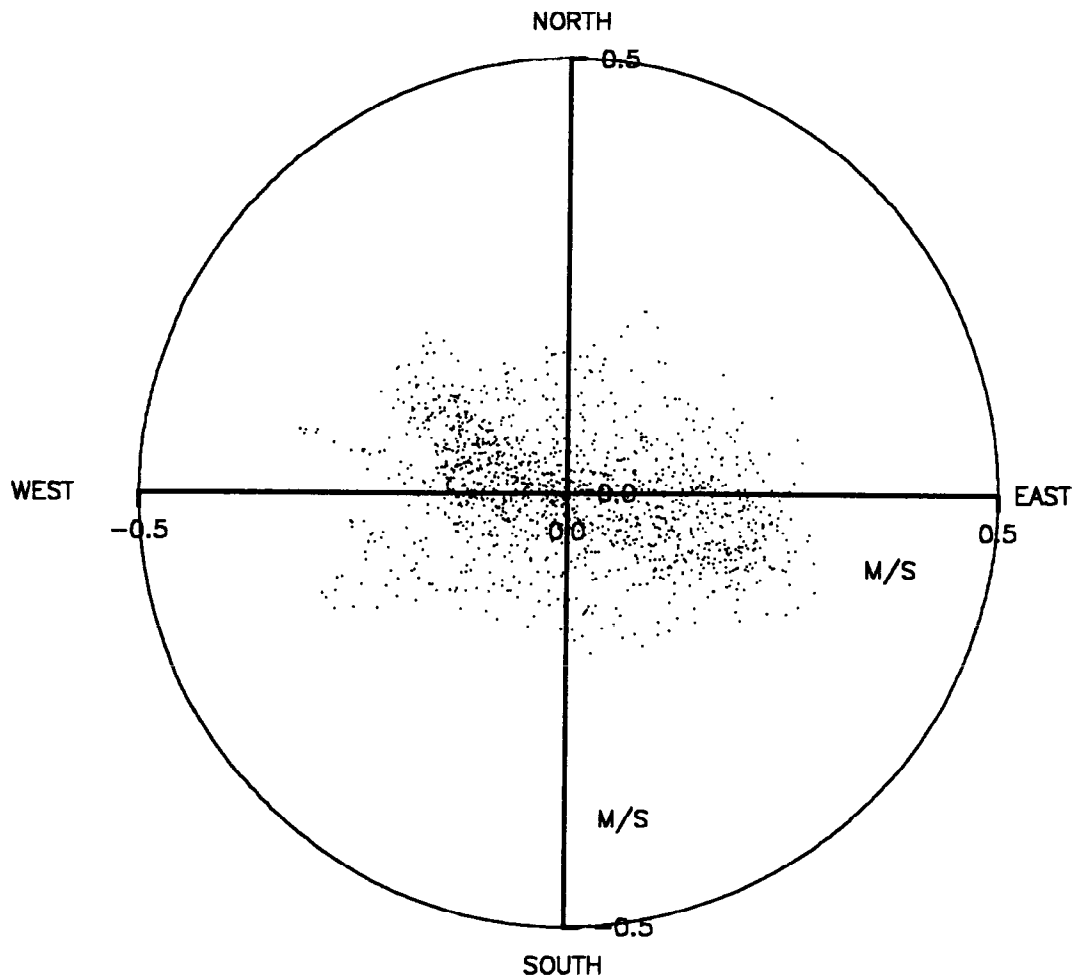
Start/End 1989/05/03 AT 22:53:00 1989/06/01 AT 15:15:00

Position 55 30.19N 05 27.96E Meter Height(m) 37.0



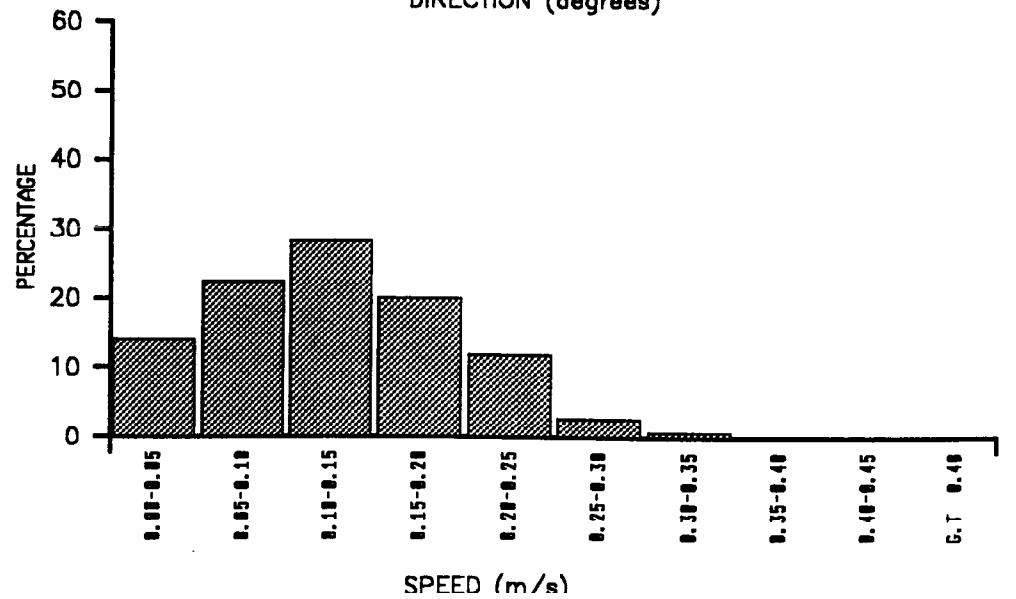
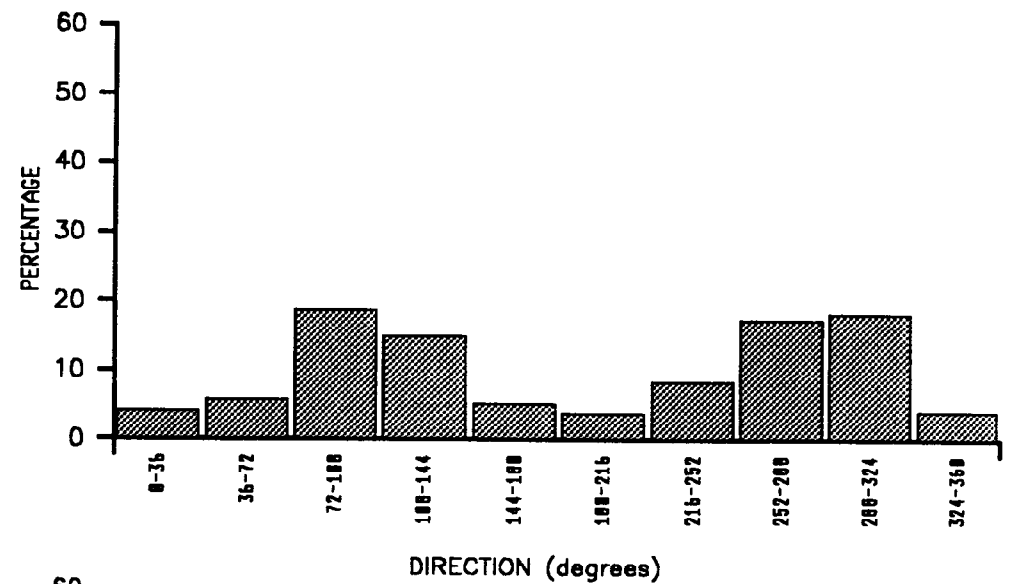
SCATTER PLOT

Meter no. 1265 Rig no. C51BC Depth of water(m) 52.0
 Start/End 1989/05/03 AT 22:53:00 1989/06/01 AT 15:15:00
 Position 55 30.19N 05 27.96E Meter Height(m) 37.0



HISTOGRAMS FOR SPEEDS AND DIRECTIONS

Meter no. 1265 Rig no. C51BC Depth of water(m) 52.0
 Start/End 1989/05/03 AT 22:53:00 1989/06/01 AT 15:15:00
 Position 55 30.19N 05 27.96E Meter Height(m) 37.0

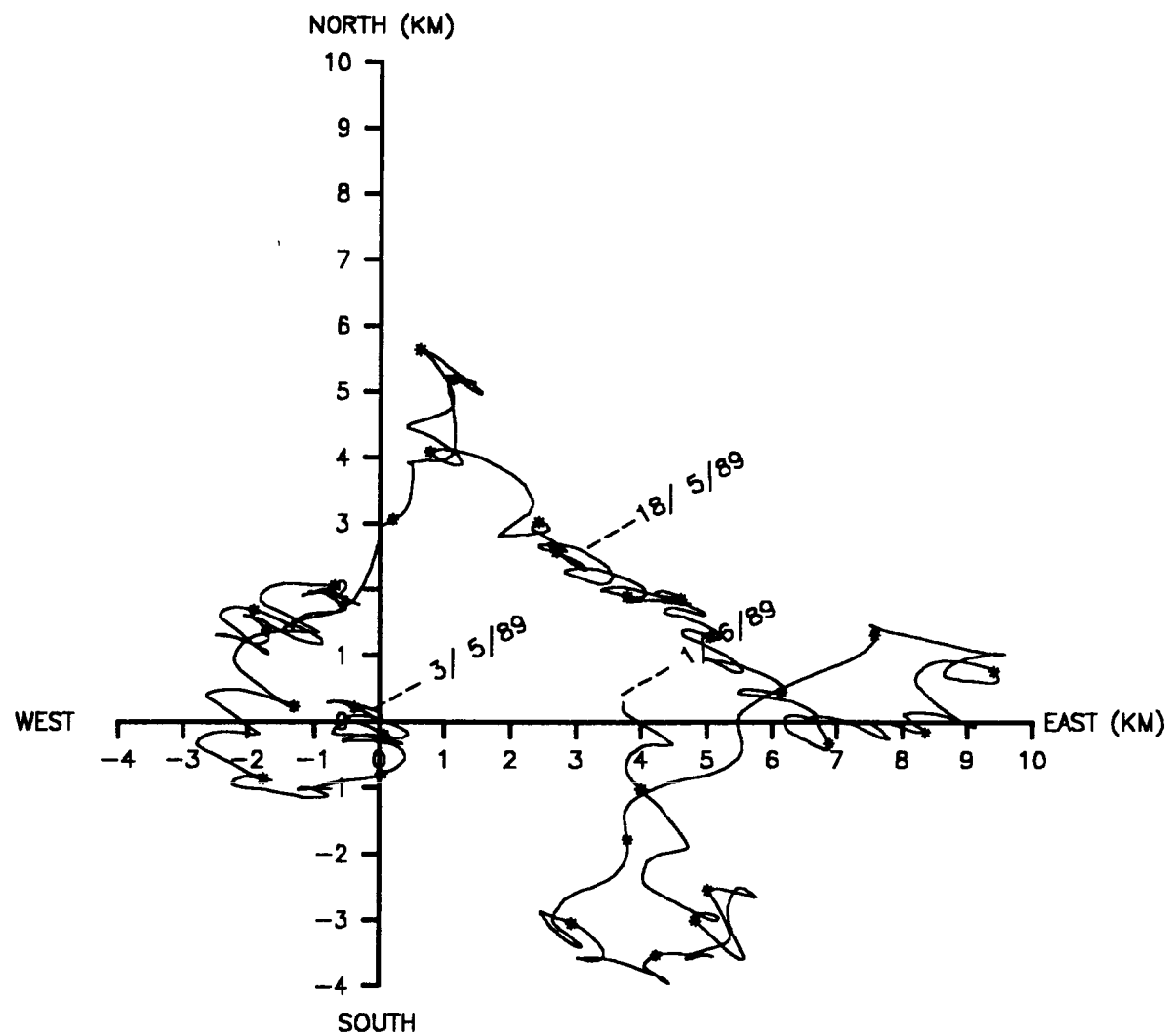


VECTOR PLOT

Meter no. 1265 Rig no. C51BC Depth of water(m) 52.0

Start/End 1989/05/03 AT 22:53:00 1989/06/01 AT 15:15:00

Position 55 30.19N 05 27.96E Meter Height(m) 37.0



STATISTICS FOR S41265T C51BCS A

	Mean	Variance	Standard deviation
Eastings	0.0045	0.15805580E-01	0.12572020E+00
Northings	0.0004	0.45698658E-02	0.67600787E-01
Speed	0.1266	0.43624155E-02	0.66048563E-01

Vector mean speed 0.0045
Vector Mean Direction 85.5

Maximum ten values

Eastings	Northings
----------	-----------

0.288	0.286	0.281	0.279	0.273	0.209	0.209	0.192	0.191	0.184
0.269	0.267	0.266	0.264	0.260	0.181	0.175	0.172	0.170	0.168

Minimum ten values

Eastings	Northings
----------	-----------

-0.271	-0.272	-0.275	-0.282	-0.287	-0.156	-0.158	-0.158	-0.162	-0.163
-0.294	-0.296	-0.308	-0.310	-0.314	-0.165	-0.167	-0.170	-0.176	-0.185

Maximum speeds

0.322	0.317	0.316	0.310	0.309	0.308	0.303	0.303	0.302	0.299
0.297	0.294	0.291	0.287	0.285	0.284	0.283	0.281	0.281	0.280
0.275	0.274	0.274	0.271	0.270	0.269	0.266	0.266	0.264	0.263
0.261	0.261	0.260	0.260	0.259	0.259	0.258	0.257	0.256	0.256
0.255	0.255	0.254	0.251	0.250	0.249	0.249	0.249	0.248	0.248
0.247	0.247	0.247	0.247	0.247	0.246	0.246	0.245	0.245	0.244
0.244	0.243	0.241	0.241	0.240	0.240	0.240	0.240	0.240	0.239
0.238	0.238	0.238	0.238	0.237	0.237	0.237	0.237	0.237	0.236
0.235	0.234	0.234	0.234	0.233	0.233	0.233	0.232	0.232	0.232
0.231	0.231	0.231	0.231	0.231	0.231	0.229	0.229	0.228	0.228

Variance ellipse statistics

Maximum variance 0.1641E-01	Direction	-77.3
Minimum variance 0.3970E-02	Direction	12.7
Total variance 0.2038E-01	Ratio of variances	0.2420E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		21.0
Average direction. maxdir +PI/2 to maxdir -PI/2		180.6

STATISTICS FOR S41265T C51BCSF A

	Mean	Variance	Standard deviation
Eastings	0.0274	0.11667536E-03	0.10801639E-01
Northings	-0.0067	0.66626491E-03	0.25812108E-01
Speed	0.0373	0.14550533E-03	0.12062557E-01

Vector mean speed 0.0282
 Vector Mean Direction 103.8

Maximum ten values									
Eastings					Northings				
0.051	0.045	0.041	0.033	0.031	0.050	0.043	0.017	0.008	-0.007
0.027	0.027	0.026	0.023	0.022	-0.008	-0.011	-0.013	-0.015	-0.020

Minimum ten values									
Eastings					Northings				
0.027	0.027	0.026	0.023	0.022	-0.008	-0.011	-0.013	-0.015	-0.020
0.020	0.019	0.019	0.015	0.015	-0.021	-0.025	-0.028	-0.033	-0.037

Maximum speeds									
0.059	0.052	0.051	0.046	0.045	0.042	0.038	0.037	0.036	0.031
0.028	0.027	0.025	0.022	0.019					

Variance ellipse statistics

Maximum variance 0.6791E-03	Direction	8.6
Minimum variance 0.1038E-03	Direction	98.6
Total variance 0.7829E-03	Ratio of variances	0.1529E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		51.1
Average direction. maxdir +PI/2 to maxdir -PI/2		122.5

Meter information details for 1261

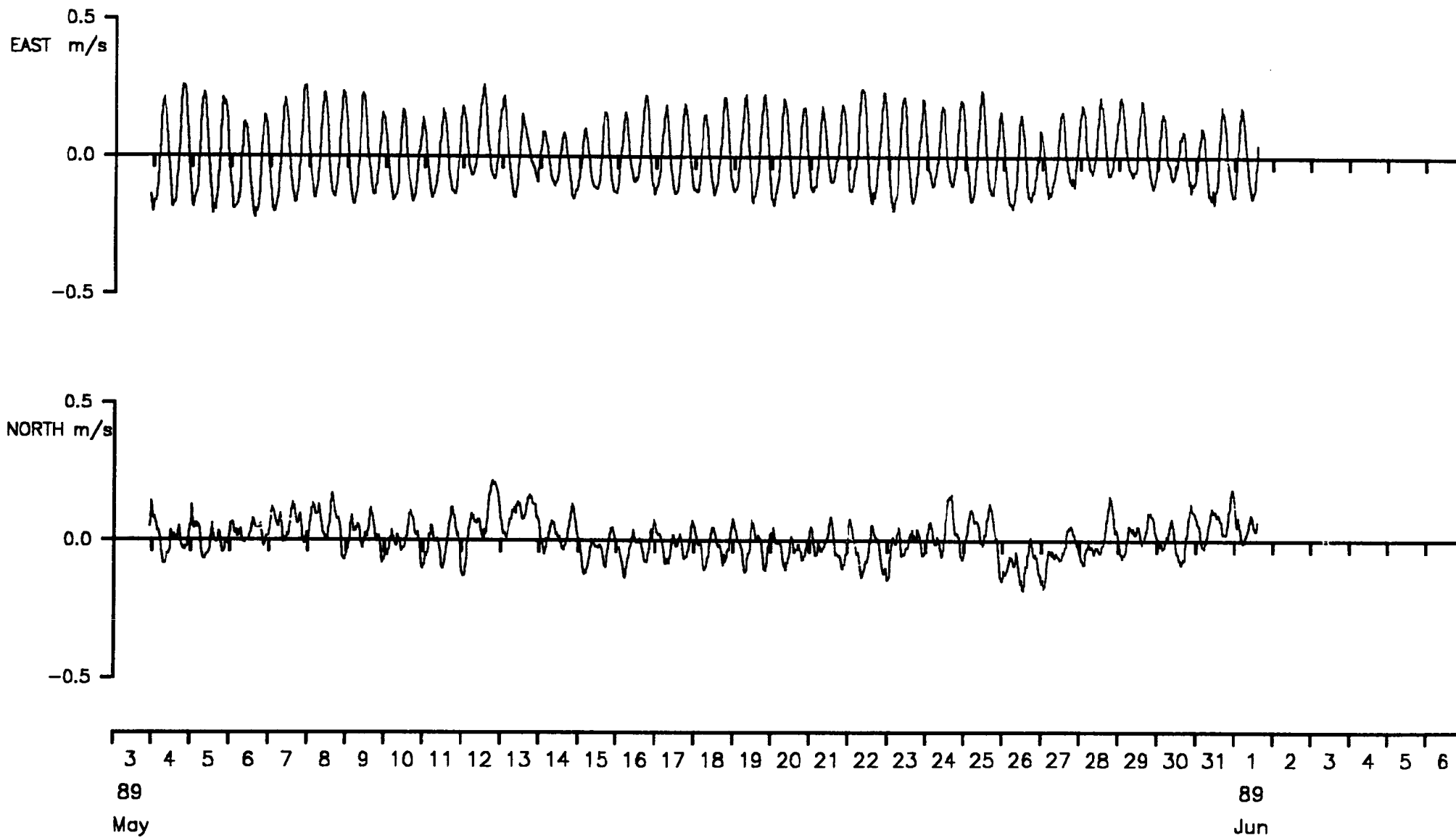
Rig No	:	C51BC
Meter No	:	1261
Recording interval	:	1800.0 seconds
Meter height from bottom	:	27.0 m
Position of meter on rig	:	MT
Meter type	:	S4
Meter started	:	03-MAY-89 19:30:00
Meter stopped	:	02-JUNE-89 11:40:00
Period switched on	:	29.7 days
Period of good data	:	28.7 days
Total number of scans	:	1377
Timing error	:	600 seconds slow
Comments	:	Meter set up to sample every 10 minutes every 30 minutes

VELOCITY COMPONENT TIME SERIES PLOT

Meter no. 1261 Rig no. C51BC Depth of water(m) 52.0

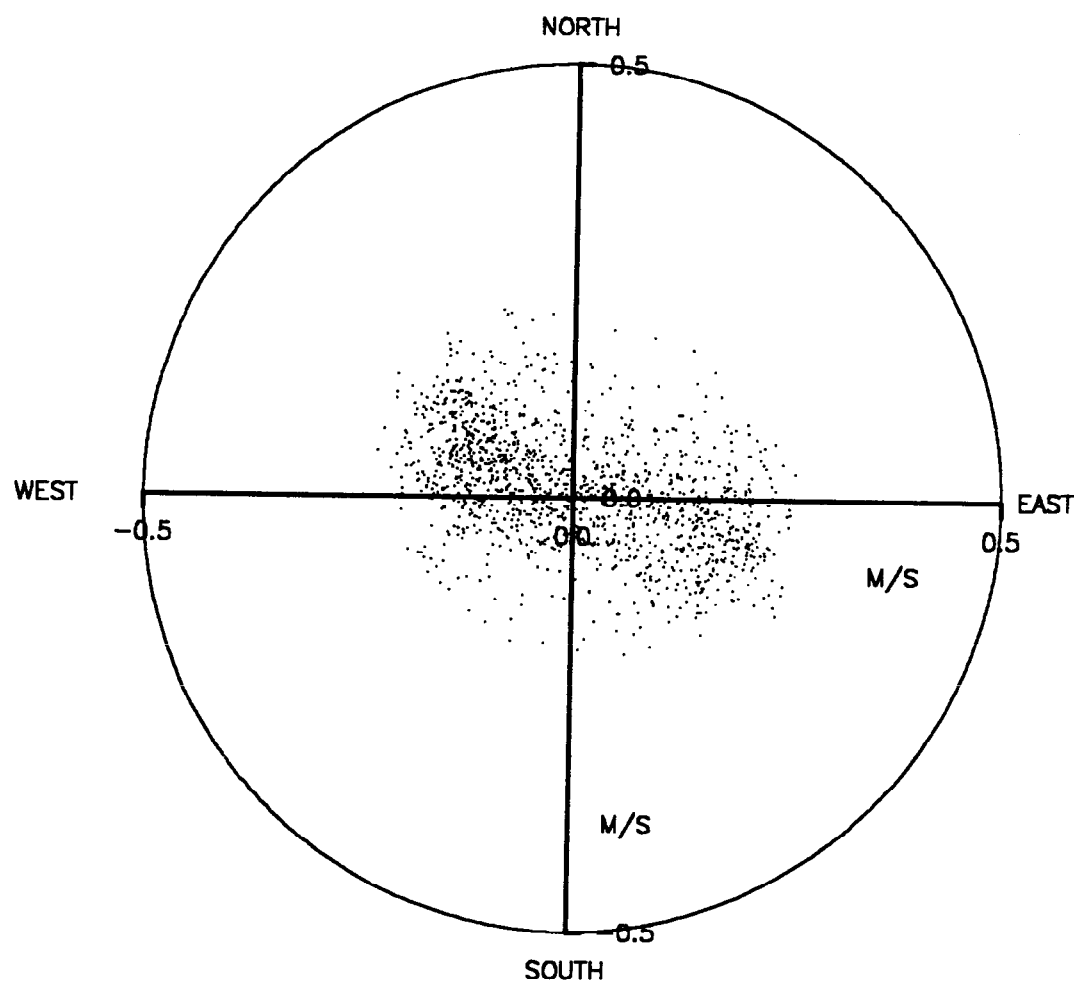
Start/End 1989/05/03 AT 22:53:00 1989/06/01 AT 15:15:00

Position 55 30.19N 05 27.96E Meter Height(m) 27.0



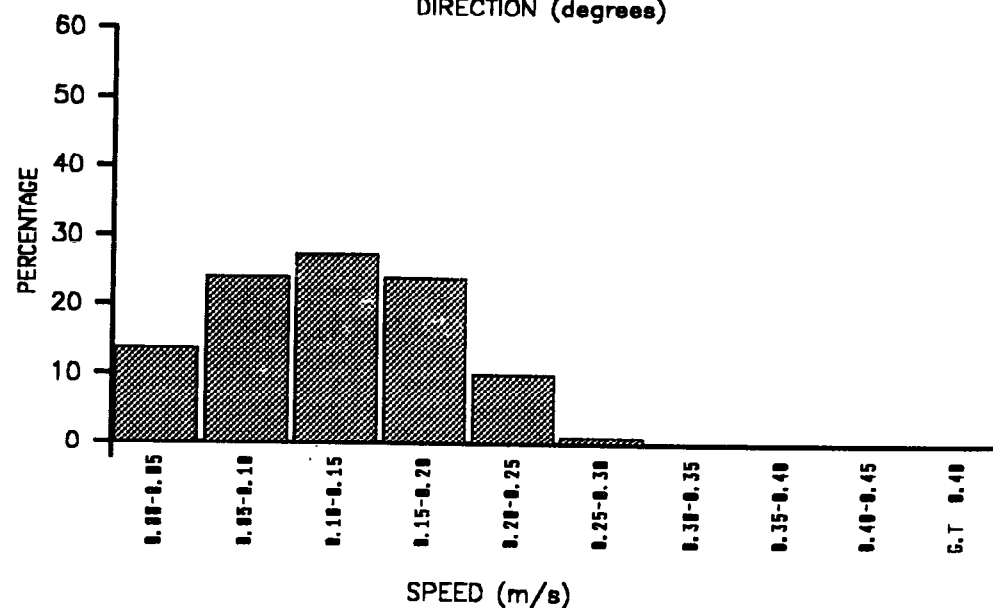
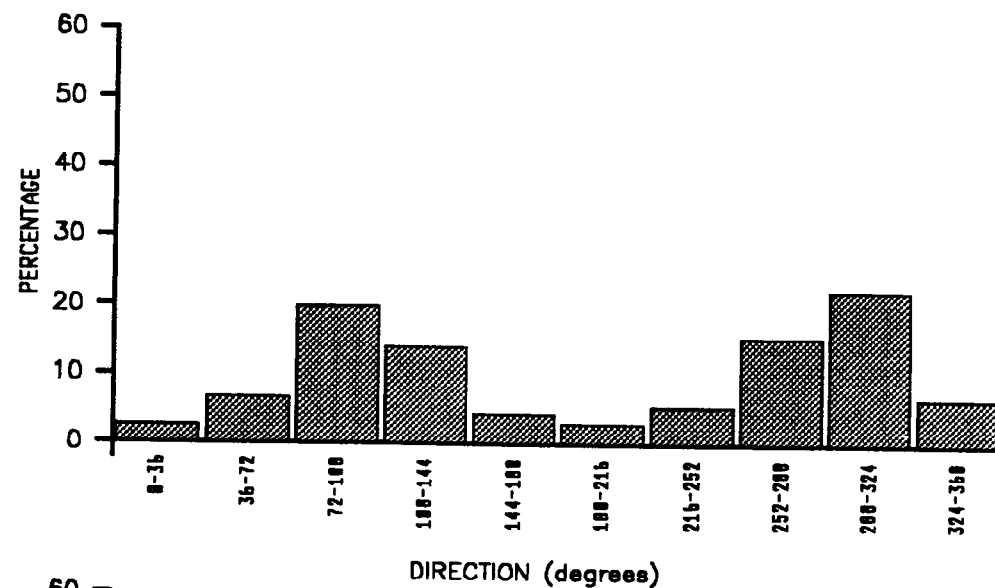
SCATTER PLOT

Meter no. 1261 Rig no. C51BC Depth of water(m) 52.0
 Start/End 1989/05/03 AT 22:53:00 1989/06/01 AT 15:15:00
 Position 55 30.19N 05 27.96E Meter Height(m) 27.0



HISTOGRAMS FOR SPEEDS AND DIRECTIONS

Meter no. 1261 Rig no. C51BC Depth of water(m) 52.0
 Start/End 1989/05/03 AT 22:53:00 1989/06/01 AT 15:15:00
 Position 55 30.19N 05 27.96E Meter Height(m) 27.0

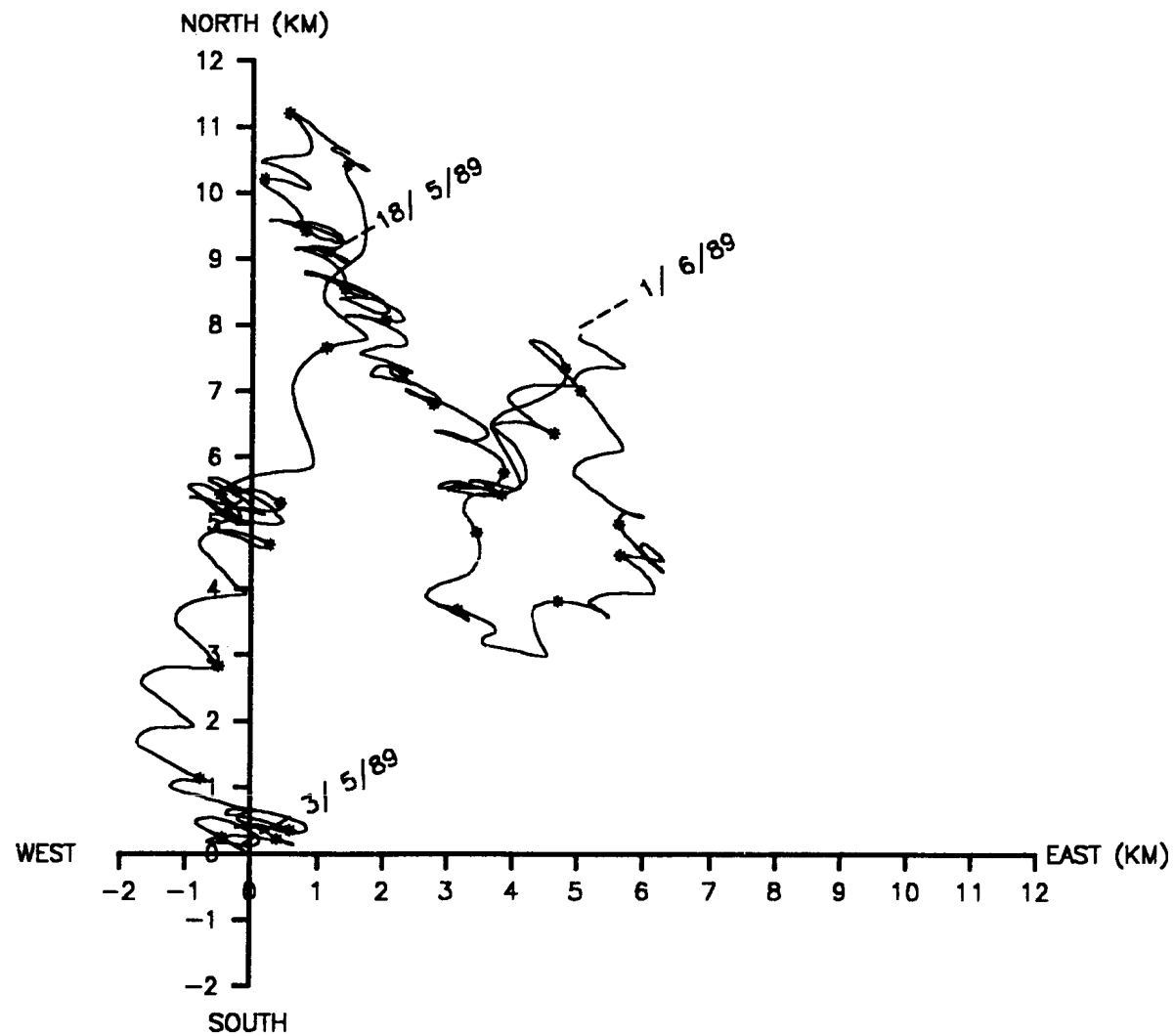


VECTOR PLOT

Meter no. 1261 Rig no. C51BC Depth of water(m) 52.0

Start/End 1989/05/03 AT 22:53:00 1989/06/01 AT 15:15:00

Position 55 30.19N 05 27.96E Meter Height(m) 27.0



STATISTICS FOR S41261MT C51BCS A

	Mean	Variance	Standard deviation
Eastings	0.0061	0.14072914E-01	0.11862928E+00
Northings	0.0095	0.44590198E-02	0.66775858E-01
Speed	0.1227	0.35853973E-02	0.59878185E-01

Vector mean speed 0.0113
 Vector Mean Direction 32.7

Maximum ten values									
Eastings					Northings				
0.261	0.255	0.255	0.254	0.254	0.216	0.213	0.211	0.210	0.204
0.251	0.248	0.247	0.246	0.246	0.202	0.195	0.193	0.187	0.185

Minimum ten values									
Eastings					Northings				
-0.197	-0.197	-0.197	-0.203	-0.203	-0.148	-0.154	-0.157	-0.157	-0.163
-0.204	-0.204	-0.210	-0.218	-0.225	-0.166	-0.168	-0.172	-0.176	-0.181

Maximum speeds									
0.274	0.269	0.267	0.267	0.262	0.256	0.256	0.256	0.255	0.254
0.253	0.252	0.252	0.250	0.248	0.247	0.246	0.246	0.245	0.245
0.240	0.238	0.238	0.238	0.237	0.236	0.235	0.235	0.234	0.234
0.234	0.233	0.233	0.233	0.232	0.231	0.231	0.231	0.231	0.231
0.230	0.230	0.229	0.229	0.229	0.228	0.227	0.227	0.227	0.226
0.226	0.226	0.226	0.225	0.225	0.225	0.223	0.223	0.223	0.222
0.222	0.222	0.221	0.221	0.221	0.221	0.220	0.220	0.220	0.219
0.219	0.219	0.218	0.218	0.218	0.217	0.216	0.216	0.216	0.216
0.216	0.215	0.215	0.214	0.214	0.214	0.214	0.213	0.213	0.213
0.212	0.212	0.212	0.212	0.211	0.211	0.210	0.210	0.210	0.210

Variance ellipse statistics

Maximum variance 0.1522E-01	Direction	-71.9
Minimum variance 0.3308E-02	Direction	18.1
Total variance 0.1853E-01	Ratio of variances	0.2173E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		18.1
Average direction. maxdir +PI/2 to maxdir -PI/2		175.8

STATISTICS FOR S41261MT C51BCSF A

	Mean	Variance	Standard deviation
Eastings	0.0101	0.10160598E-03	0.10079972E-01
Northings	-0.0019	0.10515833E-02	0.32428131E-01
Speed	0.0307	0.25569135E-03	0.15990350E-01

Vector mean speed 0.0102
Vector Mean Direction 100.8

Maximum ten values									
Eastings					Northings				
0.022	0.021	0.019	0.019	0.015	0.065	0.063	0.041	0.009	0.002
0.014	0.014	0.013	0.013	0.011	-0.013	-0.014	-0.015	-0.017	-0.017

Minimum ten values									
Eastings					Northings				
0.014	0.014	0.013	0.013	0.011	-0.013	-0.014	-0.015	-0.017	-0.017
0.009	0.000	-0.001	-0.008	-0.009	-0.023	-0.026	-0.027	-0.028	-0.029

Maximum speeds									
0.068	0.064	0.041	0.033	0.033	0.028	0.027	0.026	0.026	0.022
0.021	0.020	0.019	0.019	0.013					

Variance ellipse statistics

Maximum variance	0.1052E-02	Direction	-0.4
Minimum variance	0.1016E-03	Direction	89.6
Total variance	0.1153E-02	Ratio of variances	0.9658E-01
Average direction. maxdir	-PI/2 to maxdir +PI/2		12.6
Average direction. maxdir	+PI/2 to maxdir -PI/2		153.5

Meter information details for 1264

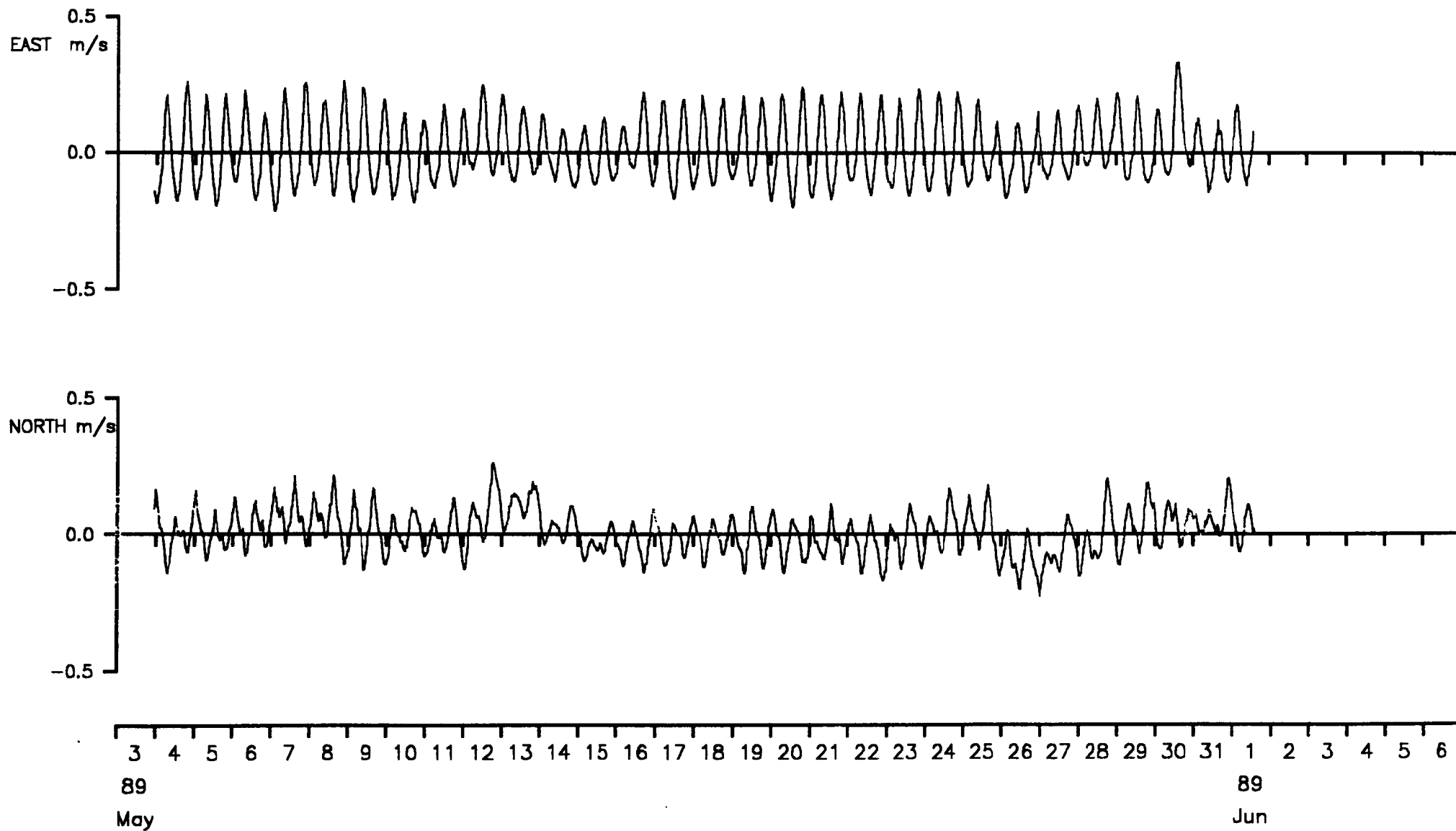
Rig No	:	C51BC
Meter No	:	1264
Recording interval	:	1800.0 seconds
Meter height from bottom	:	15.0 m
Position of meter on rig	:	MB
Meter type	:	S4
Meter started	:	03-MAY-89 19:00:00
Meter stopped	:	02-JUNE-89 19:40:00
Period switched on	:	30.0 days
Period of good data	:	28.7 days
Total number of scans	:	1377
Timing error	:	600 seconds slow
Comments	:	Meter set up to sample every 10 minutes every 30 minutes

VELOCITY COMPONENT TIME SERIES PLOT

Meter no. 1264 Rig no. C51BC Depth of water(m) 52.0

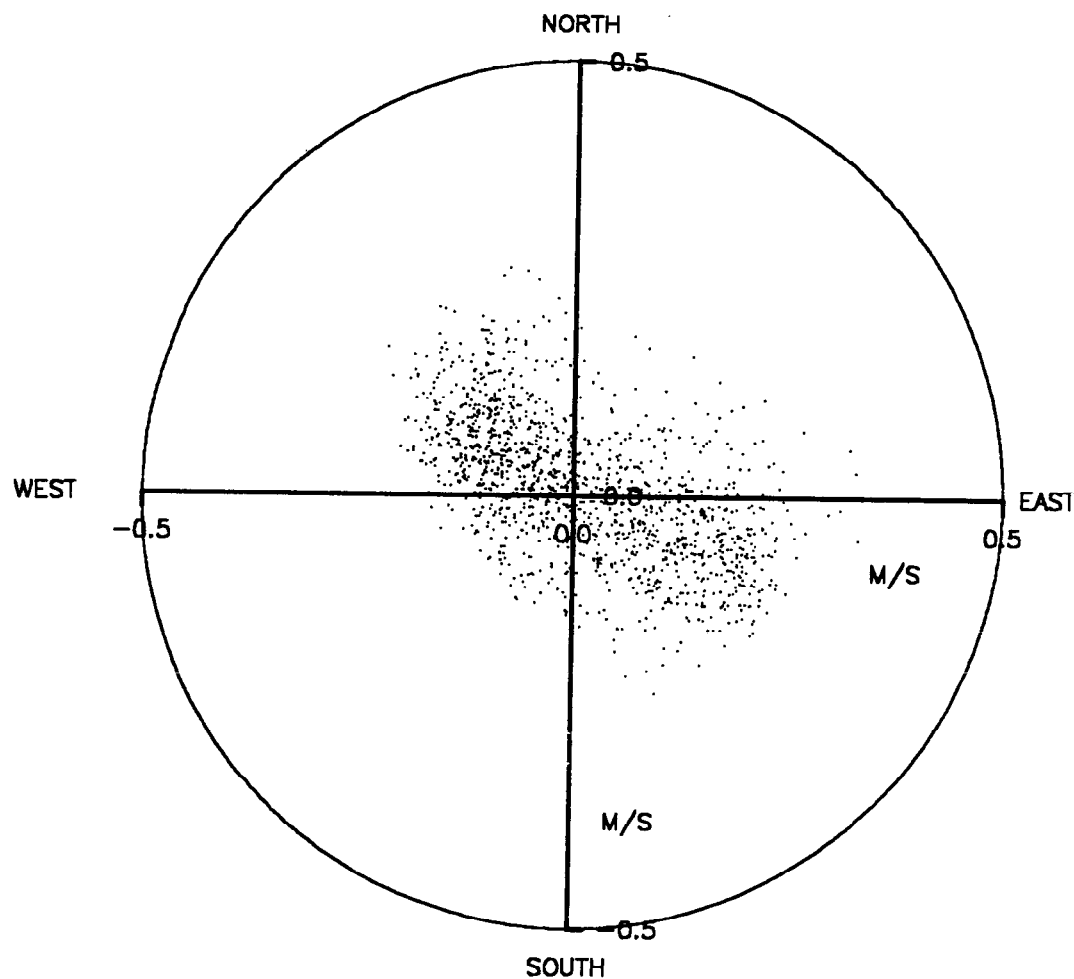
Start/End 1989/05/03 AT 22:53:00 1989/06/01 AT 15:15:00

Position 55 30.19N 05 27.96E Meter Height(m) 15.0



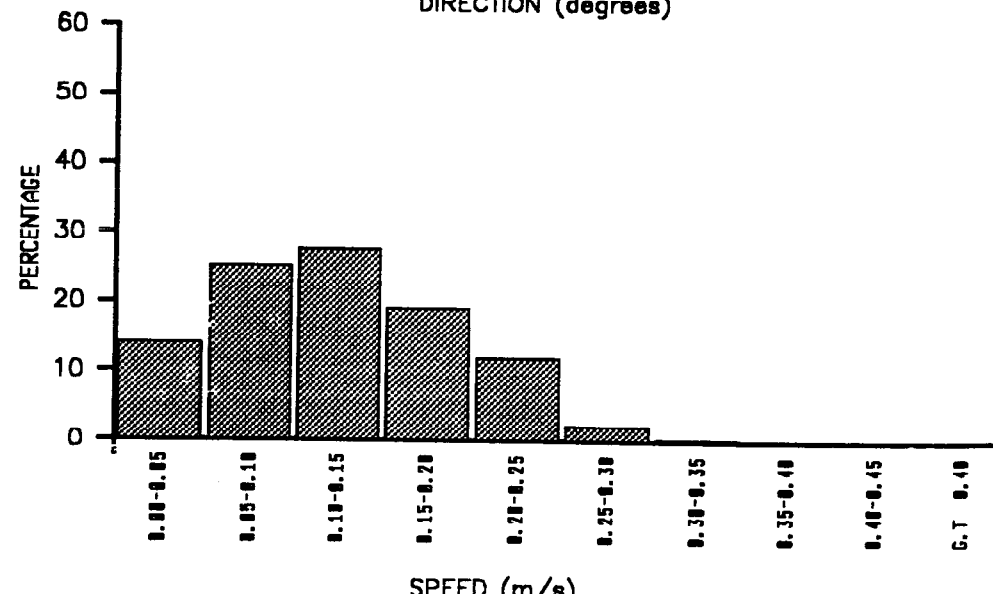
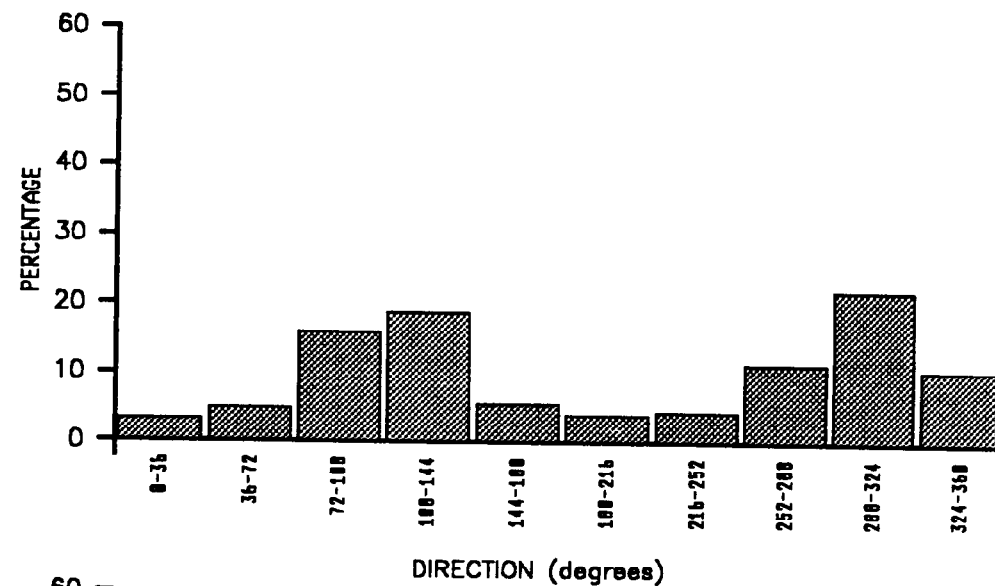
SCATTER PLOT

Meter no. 1264 Rig no. C51BC Depth of water(m) 52.0
 Start/End 1989/05/03 AT 22:53:00 1989/06/01 AT 15:15:00
 Position 55 30.19N 05 27.96E Meter Height(m) 15.0



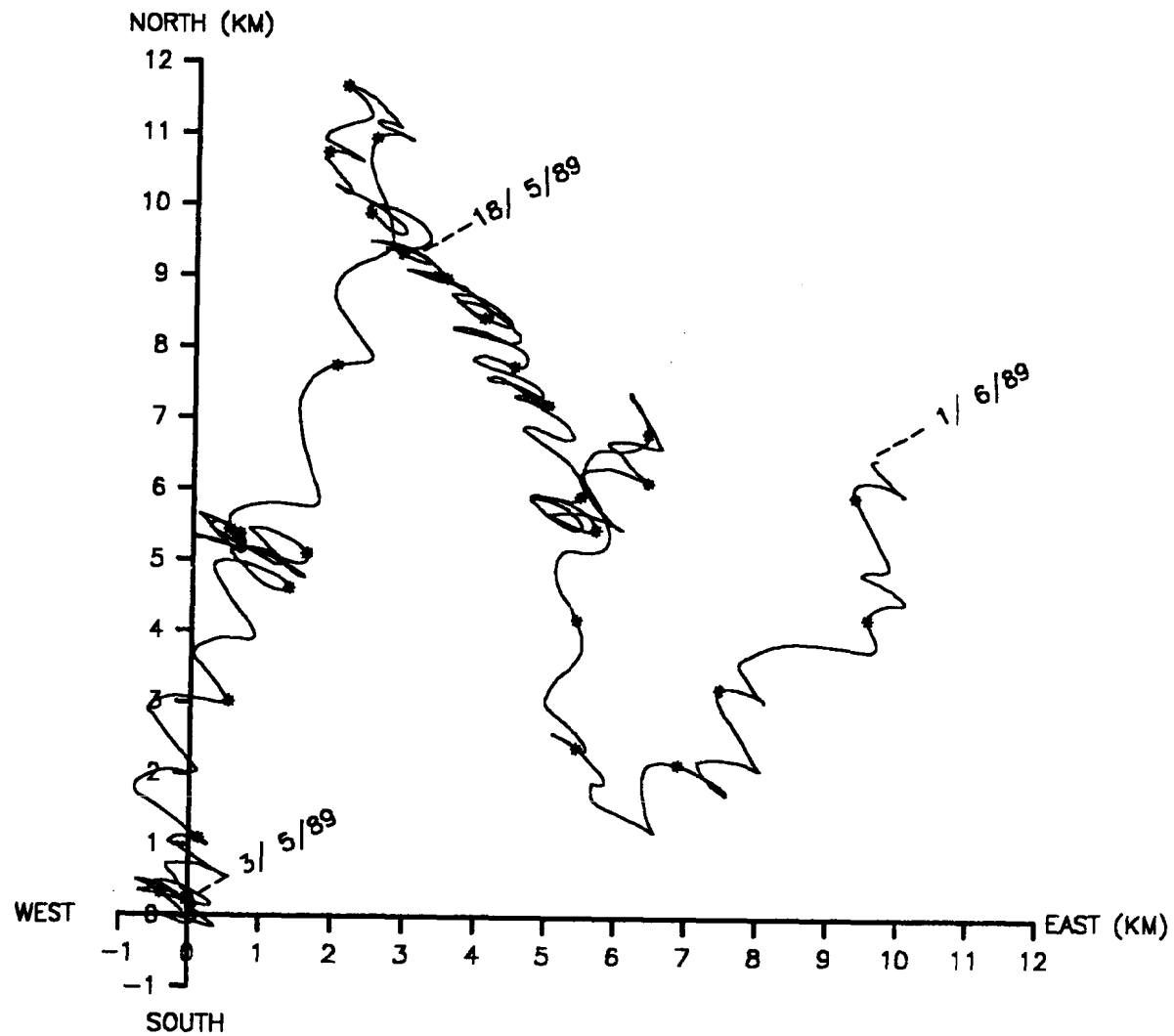
HISTOGRAMS FOR SPEEDS AND DIRECTIONS

Meter no. 1264 Rig no. C51BC Depth of water(m) 52.0
 Start/End 1989/05/03 AT 22:53:00 1989/06/01 AT 15:15:00
 Position 55 30.19N 05 27.96E Meter Height(m) 15.0



VECTOR PLOT

Meter no. 1264 Rig no. C51BC Depth of water(m) 52.0
Start/End 1989/05/03 AT 22:53:00 1989/06/01 AT 15:15:00
Position 55 30.19N 05 27.96E Meter Height(m) 15.0



STATISTICS FOR S41264MB C51BCS A

	Mean	Variance	Standard deviation
Eastings	0.0117	0.12840092E-01	0.11331409E+00
Northings	0.0078	0.62414631E-02	0.79002917E-01
Speed	0.1232	0.40811077E-02	0.63883543E-01

Vector mean speed 0.0141
 Vector Mean Direction 56.2

Maximum ten values									
Eastings					Northings				
0.333	0.329	0.322	0.311	0.297	0.261	0.258	0.252	0.248	0.227
0.272	0.269	0.262	0.259	0.256	0.215	0.213	0.210	0.209	0.205

Minimum ten values									
Eastings					Northings				
-0.186	-0.187	-0.187	-0.191	-0.192	-0.168	-0.171	-0.175	-0.178	-0.180
-0.193	-0.196	-0.201	-0.211	-0.217	-0.195	-0.195	-0.202	-0.207	-0.228

Maximum speeds									
0.337	0.330	0.326	0.311	0.298	0.279	0.275	0.275	0.274	0.272
0.271	0.267	0.266	0.265	0.264	0.263	0.263	0.262	0.262	0.260
0.259	0.257	0.257	0.256	0.253	0.252	0.252	0.252	0.251	0.251
0.251	0.250	0.249	0.248	0.248	0.247	0.247	0.247	0.246	0.246
0.245	0.245	0.244	0.244	0.244	0.244	0.243	0.242	0.242	0.242
0.240	0.239	0.238	0.238	0.237	0.237	0.237	0.236	0.235	0.235
0.234	0.234	0.234	0.233	0.233	0.233	0.232	0.232	0.232	0.232
0.232	0.231	0.230	0.230	0.230	0.229	0.228	0.227	0.227	0.226
0.226	0.226	0.225	0.225	0.225	0.225	0.224	0.223	0.223	0.223
0.223	0.222	0.222	0.222	0.221	0.221	0.221	0.221	0.221	0.221

Variance ellipse statistics

Maximum variance 0.1561E-01	Direction	-61.5
Minimum variance 0.3476E-02	Direction	28.5
Total variance 0.1908E-01	Ratio of variances	0.2227E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		14.8
Average direction. maxdir +PI/2 to maxdir -PI/2		175.6

STATISTICS FOR S41264MB C51BCSF A

	Mean	Variance	Standard deviation
Eastings	0.0128	0.52774005E-04	0.72645694E-02
Northings	-0.0019	0.12758840E-02	0.35719518E-01
Speed	0.0326	0.36580651E-03	0.19126069E-01

Vector mean speed 0.0129
 Vector Mean Direction 98.3

Maximum ten values									
Eastings					Northings				
0.024	0.020	0.019	0.018	0.017	0.073	0.071	0.045	0.010	-0.004
0.016	0.015	0.015	0.013	0.012	-0.011	-0.012	-0.019	-0.019	-0.020

Minimum ten values									
Eastings					Northings				
0.016	0.015	0.015	0.013	0.012	-0.011	-0.012	-0.019	-0.019	-0.020
0.011	0.007	0.006	-0.001	-0.001	-0.021	-0.029	-0.029	-0.029	-0.032

Maximum speeds									
0.077	0.073	0.046	0.033	0.033	0.032	0.031	0.027	0.025	0.024
0.022	0.020	0.020	0.018	0.010					

Variance ellipse statistics

Maximum variance	0.1280E-02	Direction	3.3
Minimum variance	0.4861E-04	Direction	93.3
Total variance	0.1329E-02	Ratio of variances	0.3797E-01
Average direction. maxdir	-PI/2 to maxdir +PI/2		5.8
Average direction. maxdir	+PI/2 to maxdir -PI/2		142.0

Meter information details for 9069

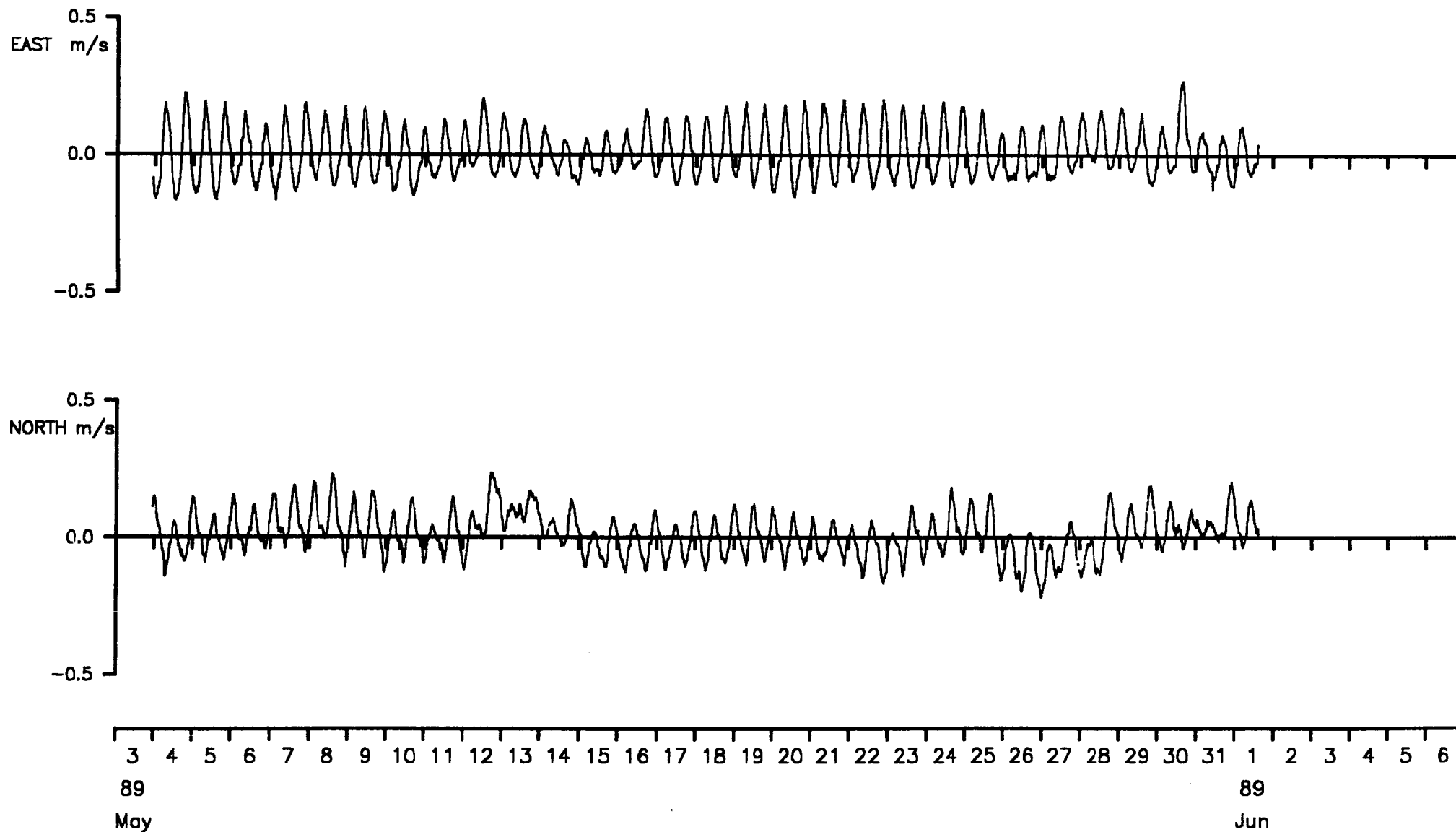
Rig No	:	C51BC
Meter No	:	9069
Recording interval	:	600.0 seconds
Meter height from bottom	:	7.0 m
Position of meter on rig	:	B
Meter type	:	AS
Meter started	:	03-MAY-89 03:40:00
Meter stopped	:	01-JUNE-89 16:00:00
Period switched on	:	29.5 days
Period of good data	:	28.7 days
Total number of scans	:	4130
Timing error	:	None
Comments	:	Spikes present in parameter data and temperature values are a few degrees higher than CTD cast comparisons

VELOCITY COMPONENT TIME SERIES PLOT

Meter no. 9069 Rig no. C51BC Depth of water(m) 52.0

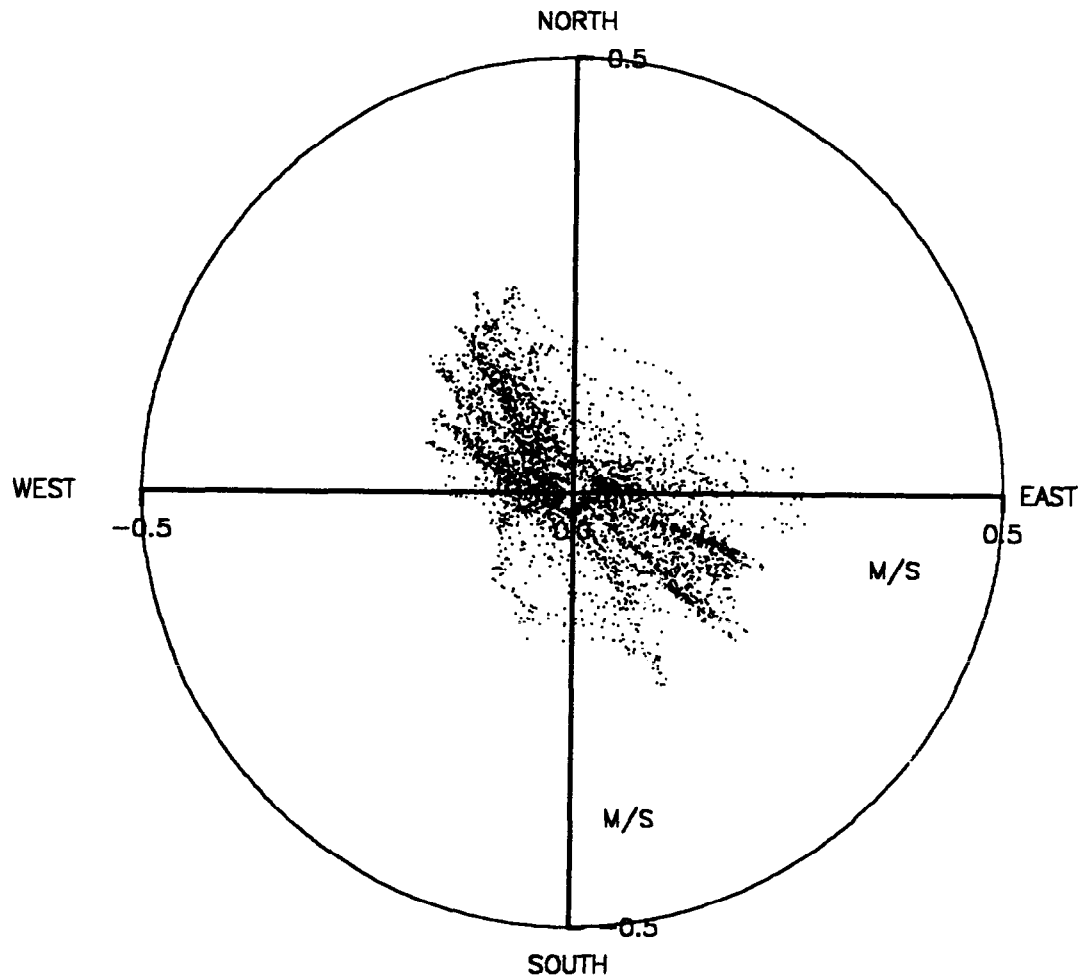
Start/End 1989/05/03 AT 22:53:00 1989/06/01 AT 15:15:00

Position 55 30.19N 05 27.96E Meter Height(m) 7.0



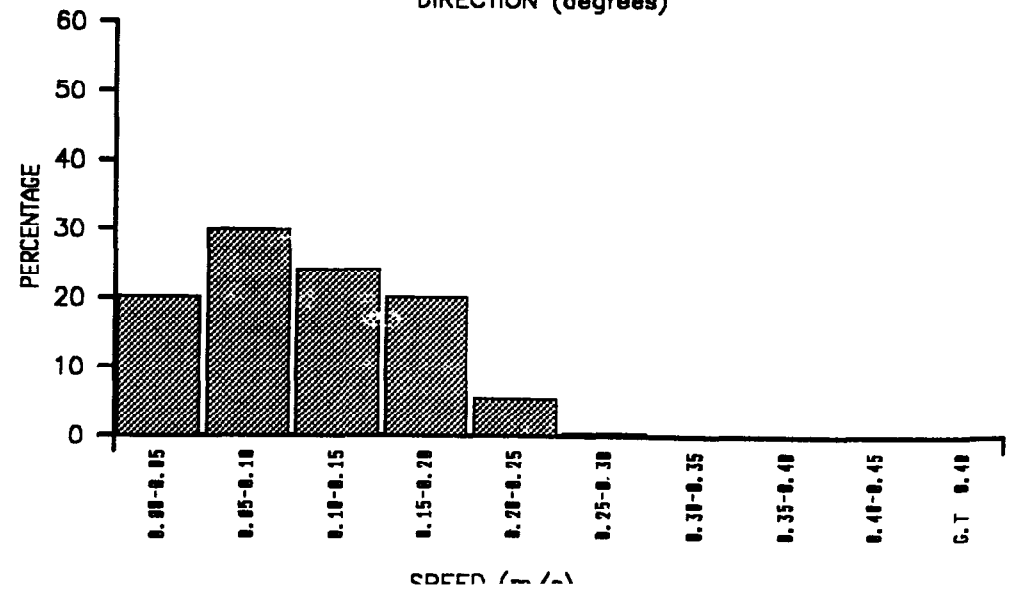
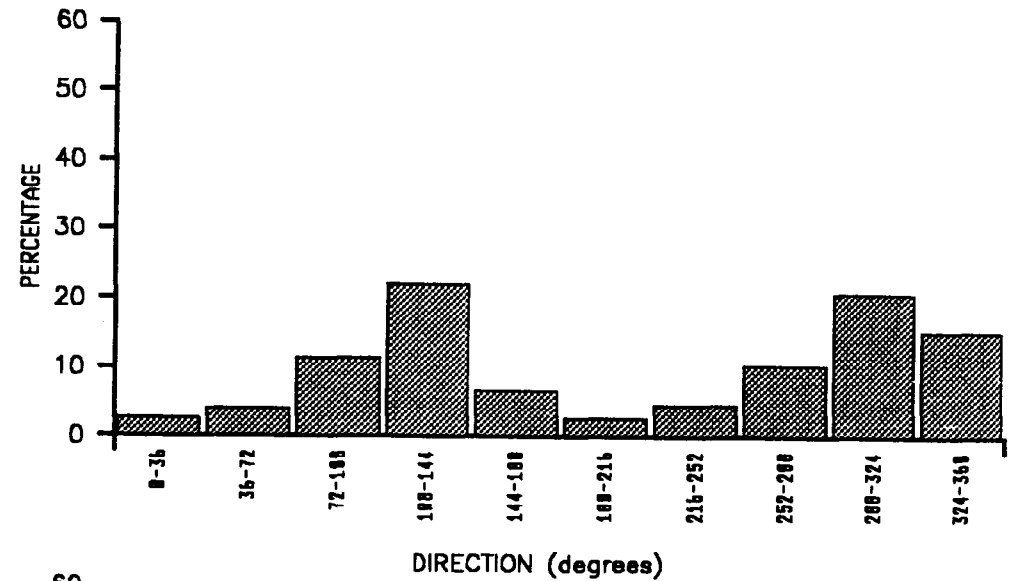
SCATTER PLOT

Meter no. 9069 Rig no. C51BC Depth of water(m) 52.0
 Start/End 1989/05/03 AT 22:53:00 1989/06/01 AT 15:15:00
 Position 55 30.19N 05 27.96E Meter Height(m) 7.0



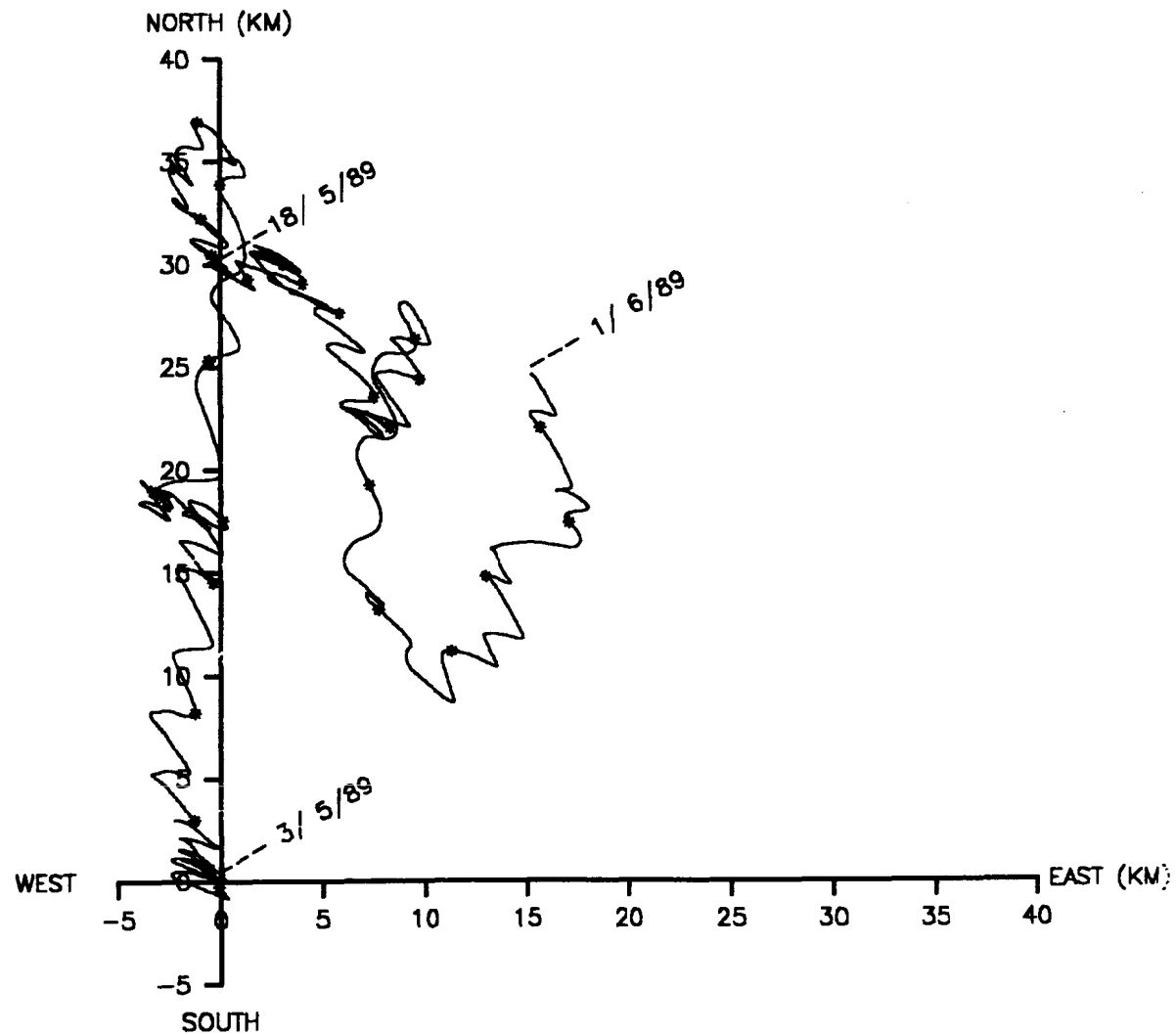
HISTOGRAMS FOR SPEEDS AND DIRECTIONS

Meter no. 9069 Rig no. C51BC Depth of water(m) 52.0
 Start/End 1989/05/03 AT 22:53:00 1989/06/01 AT 15:15:00
 Position 55 30.19N 05 27.96E Meter Height(m) 7.0



VECTOR PLOT

Meter no. 9069 Rig no. C51BC Depth of water(m) 52.0
Start/End 1989/05/03 AT 22:53:00 1989/06/01 AT 15:15:00
Position 55 30.19N 05 27.96E Meter Height(m) 7.0

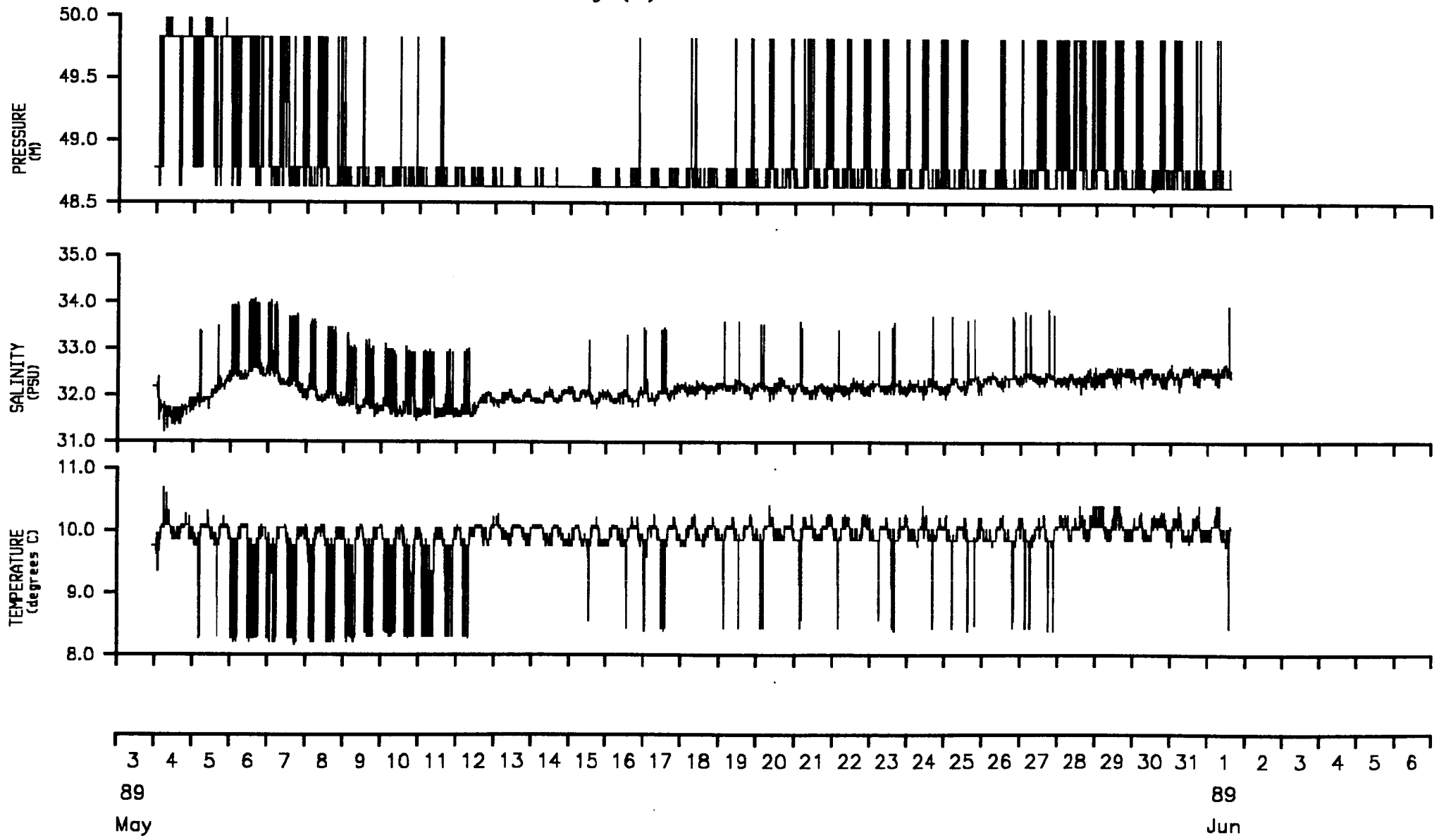


TEMPERATURE,SALINITY AND PRESSURE TIME SERIES PLOTS

Meter no. 9069 Rig no. C51BC Depth of water(m) 52.0

Start/End 1989/05/03 AT 22:53:00 1989/06/01 AT 15:15:00

Position 55 30.19N 05 27.96E Meter Height(m) 7.0



STATISTICS FOR AS9069B C51BCS A

	Mean	Variance	Standard deviation
Eastings	0.0062	0.81244521E-02	0.90135753E-01
Northings	0.0099	0.62433183E-02	0.79014659E-01
Speed	0.1059	0.32825943E-02	0.57293929E-01

Vector mean speed 0.0117
Vector Mean Direction 31.9

Maximum ten values									
Eastings					Northings				
0.270	0.267	0.263	0.258	0.256	0.236	0.234	0.234	0.232	0.229
0.255	0.255	0.254	0.250	0.245	0.228	0.228	0.227	0.226	0.225

Minimum ten values									
Eastings					Northings				
-0.161	-0.162	-0.162	-0.163	-0.163	-0.199	-0.202	-0.203	-0.206	-0.207
-0.164	-0.165	-0.167	-0.167	-0.171	-0.208	-0.214	-0.219	-0.220	-0.221

Maximum speeds									
0.273	0.267	0.264	0.258	0.258	0.258	0.258	0.255	0.255	0.255
0.255	0.255	0.255	0.255	0.252	0.252	0.249	0.249	0.249	0.246
0.246	0.246	0.246	0.246	0.246	0.246	0.243	0.243	0.243	0.243
0.243	0.243	0.243	0.243	0.241	0.241	0.241	0.241	0.238	0.238
0.238	0.238	0.238	0.238	0.238	0.235	0.235	0.235	0.235	0.235
0.235	0.235	0.232	0.232	0.232	0.232	0.232	0.232	0.232	0.232
0.229	0.229	0.229	0.229	0.229	0.229	0.229	0.226	0.226	0.226
0.226	0.226	0.226	0.226	0.226	0.226	0.223	0.223	0.223	0.223
0.223	0.223	0.223	0.223	0.223	0.223	0.223	0.220	0.220	0.220
0.220	0.220	0.220	0.220	0.220	0.220	0.217	0.217	0.217	0.217

Variance ellipse statistics

Maximum variance 0.1197E-01	Direction	-50.7
Minimum variance 0.2400E-02	Direction	39.3
Total variance 0.1437E-01	Ratio of variances	0.2006E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		7.8
Average direction. maxdir +PI/2 to maxdir -PI/2		169.7

STATISTICS FOR AS9069B C51BCSF A

	Mean	Variance	Standard deviation
Eastings	0.0077	0.35651634E-03	0.18881645E-01
Northings	0.0047	0.23287092E-02	0.48256699E-01
Speed	0.0442	0.79230266E-03	0.28147869E-01

Vector mean speed 0.0090
 Vector Mean Direction 58.8

Maximum ten values									
Eastings					Northings				
0.052	0.050	0.046	0.044	0.038	0.120	0.114	0.112	0.095	0.093
0.036	0.034	0.033	0.032	0.028	0.078	0.076	0.075	0.075	0.069

Minimum ten values									
Eastings					Northings				
-0.022	-0.023	-0.023	-0.024	-0.025	-0.051	-0.053	-0.057	-0.066	-0.069
-0.026	-0.028	-0.028	-0.029	-0.031	-0.078	-0.092	-0.096	-0.105	-0.108

Maximum speeds									
0.122	0.117	0.113	0.110	0.106	0.100	0.099	0.096	0.092	0.080
0.078	0.077	0.076	0.075	0.074	0.073	0.070	0.070	0.068	0.066
0.064	0.061	0.059	0.056	0.055	0.055	0.055	0.054	0.053	0.052
0.052	0.051	0.049	0.048	0.048	0.047	0.047	0.045	0.042	0.042
0.040	0.039	0.037	0.035	0.034	0.034	0.034	0.033	0.033	0.032
0.031	0.031	0.030	0.030	0.030	0.030	0.030	0.029	0.028	0.028
0.028	0.027	0.027	0.027	0.027	0.026	0.025	0.024	0.023	0.023
0.022	0.022	0.021	0.020	0.020	0.019	0.019	0.018	0.017	0.017
0.017	0.017	0.014	0.013	0.013	0.011	0.010	0.009	0.008	0.007
0.003									

Variance ellipse statistics

Maximum variance 0.2340E-02	Direction	4.4
Minimum variance 0.3448E-03	Direction	94.4
Total variance 0.2685E-02	Ratio of variances	0.1473E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		6.4
Average direction. maxdir +PI/2 to maxdir -PI/2		161.4

STICK TIME SERIES PLOT

Rig no. C51BC Depth of water(m) 52.0

Start/End 1989/05/03 AT 22:53:00 1989/06/01 AT 15:15:00

Position 55 30.19N 05 27.96E

Filtered Series Scale 0.1 m/s

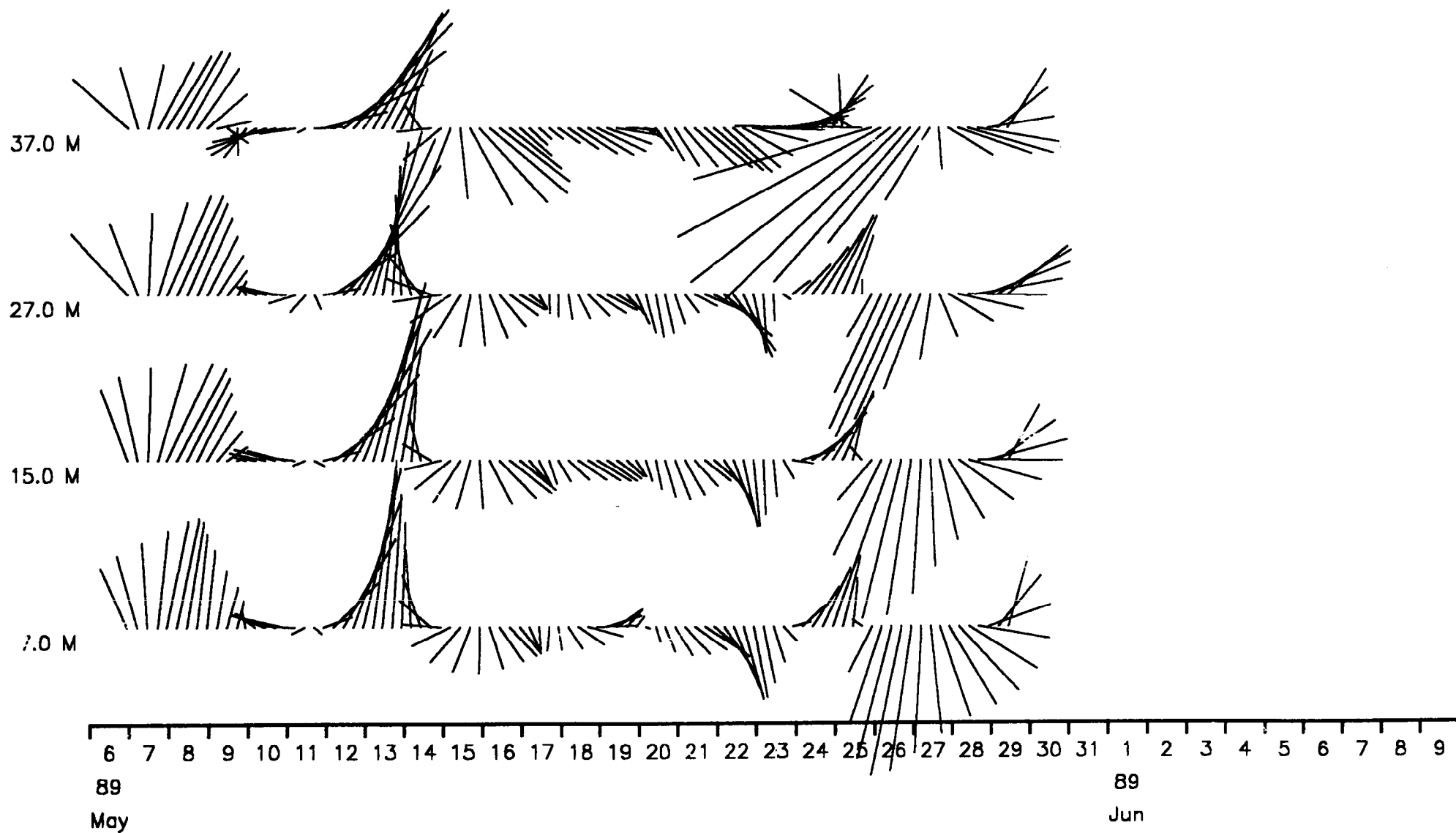
Meter No. Meter Height

9069 7.0 M

1264 15.0 M

1261 27.0 M

1265 37.0 M



Rig information details for C53BC

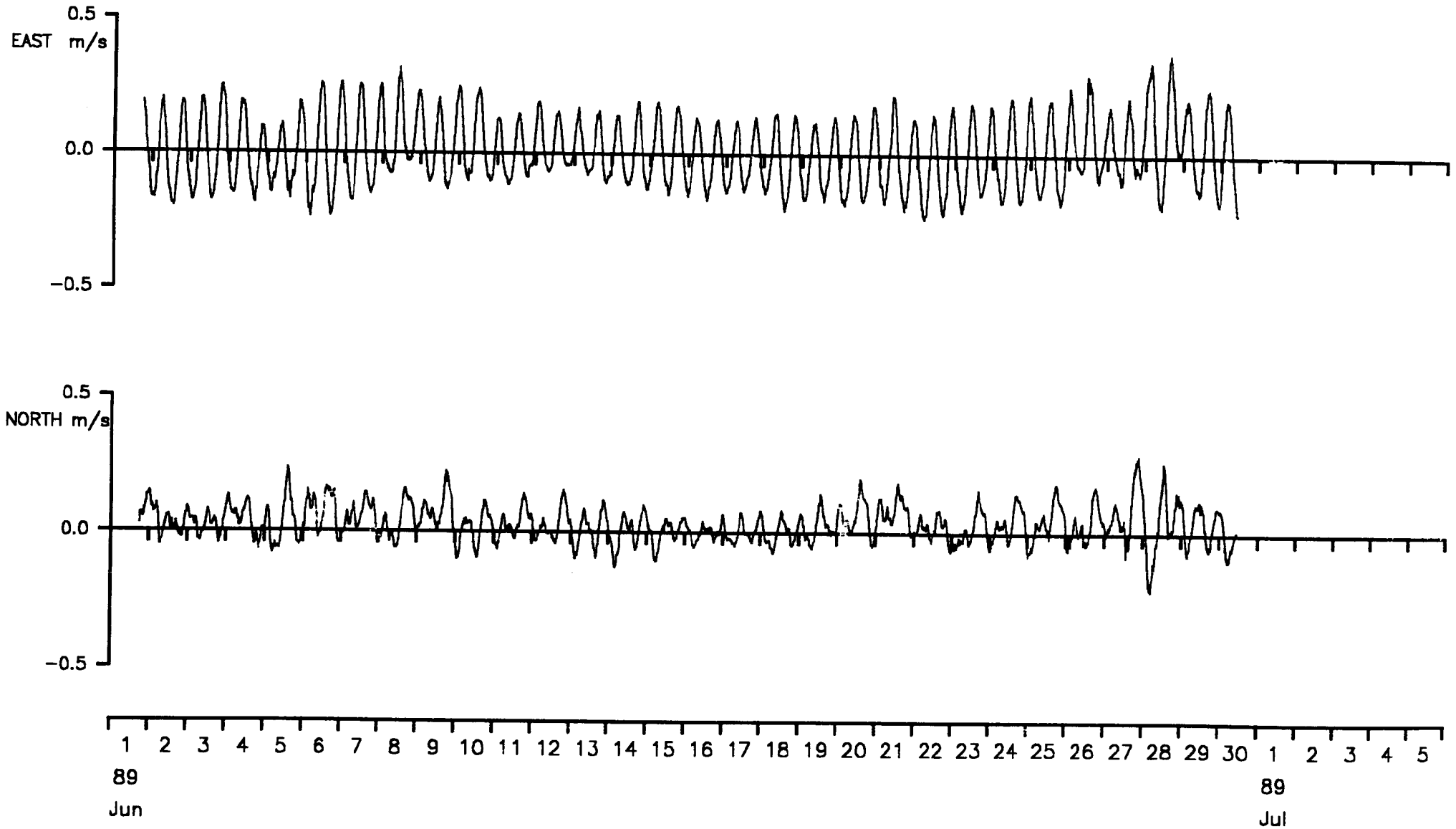
Position Latitude	:	55 29.85N
Position Longitude	:	05 30.52E
Water depth	:	52.0 m
Deployed on cruise	:	C53
Recovered on cruise	:	C55
Site name identification	:	B
Magnetic deviation	:	2.8 degrees west
Rig deployed on	:	01-JUNE-89 18:12:00
Rig recovered on	:	30-JUNE-89 11:25:00
Period of deployment	:	28.7 days
Comments	:	Launch and recovery successful

Meter information details for 1118

Rig No	:	C53BC
Meter No	:	1118
Recording interval	:	600.0 seconds
Meter height from bottom	:	37.0 m
Position of meter on rig	:	T
Meter type	:	S4
Meter started	:	31-MAY-89 20:00:00
Meter stopped	:	30-JUNE-89 19:50:00
Period switched on	:	30.0 days
Period of good data	:	28.7 days
Total number of scans	:	4135
Timing error	:	None
Comments	:	Good record obtained

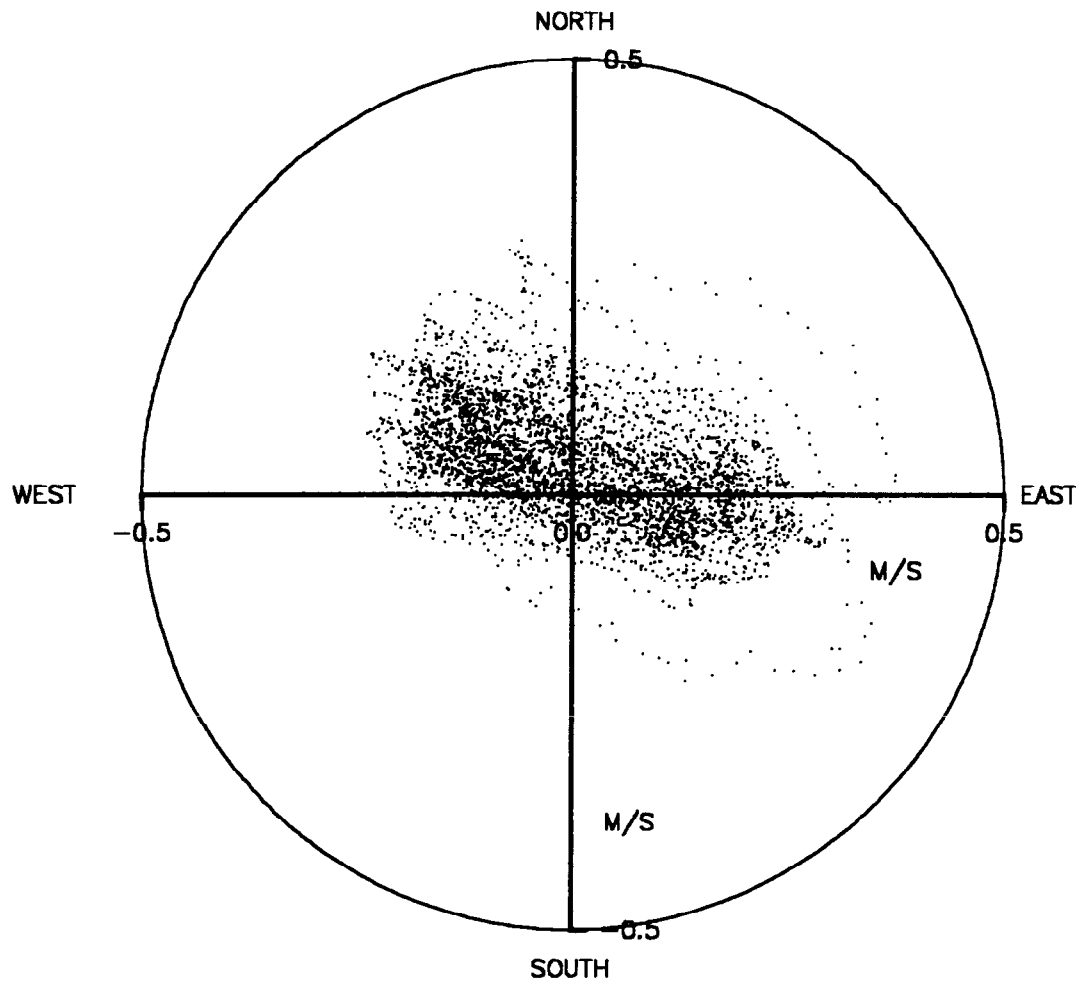
VELOCITY COMPONENT TIME SERIES PLOT

Meter no. 1118 Rig no. C53BC Depth of water(m) 52.0
Start/End 1989/06/01 AT 18:12:00 1989/06/30 AT 11:25:00
Position 55 29.85N 05 30.52E Meter Height(m) 37.0



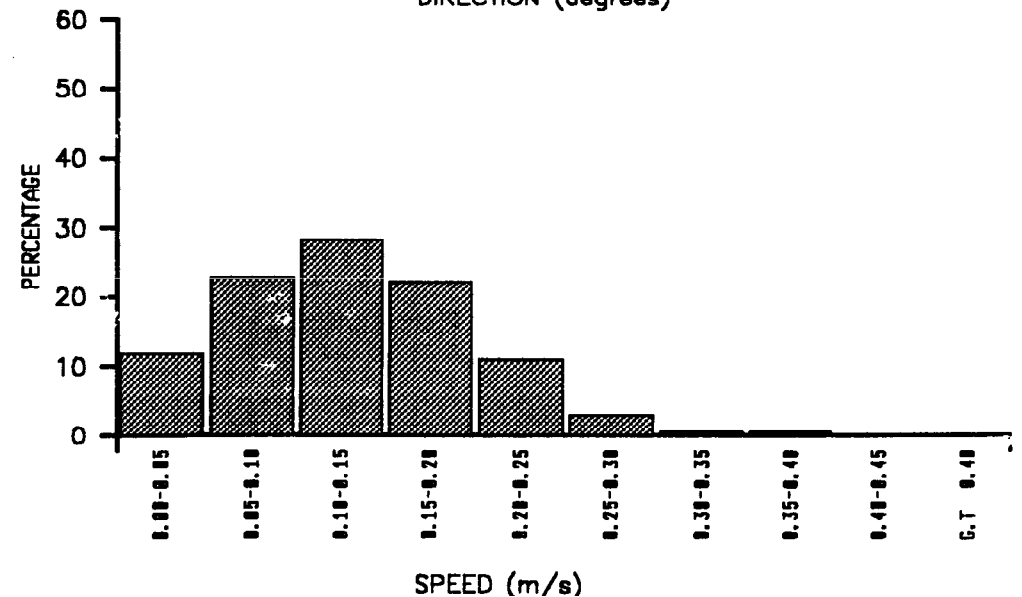
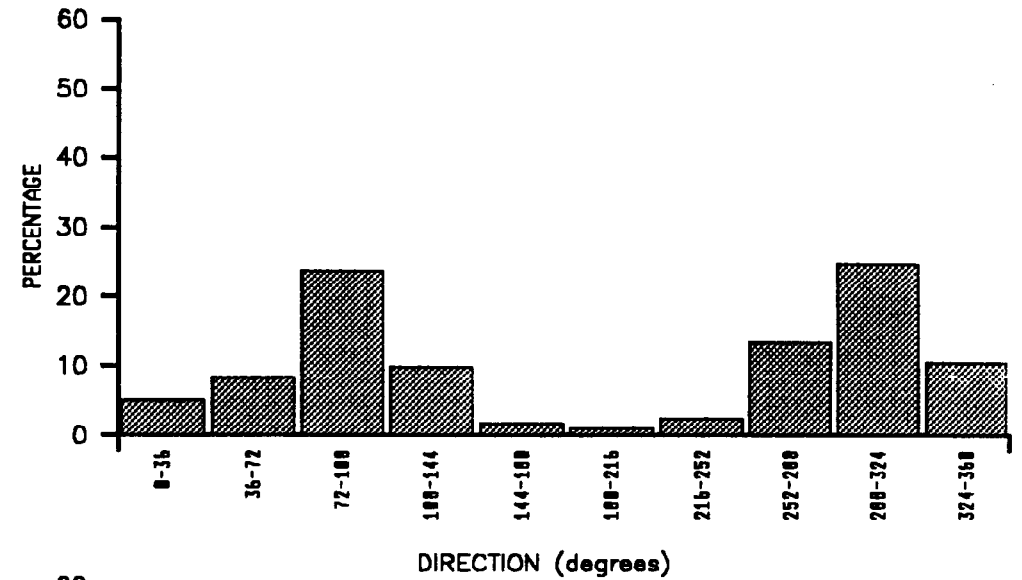
SCATTER PLOT

Meter no. 1118 Rig no. C53BC Depth of water(m) 52.0
 Start/End 1989/06/01 AT 18:12:00 1989/06/30 AT 11:25:00
 Position 55 29.85N 05 30.52E Meter Height(m) 37.0



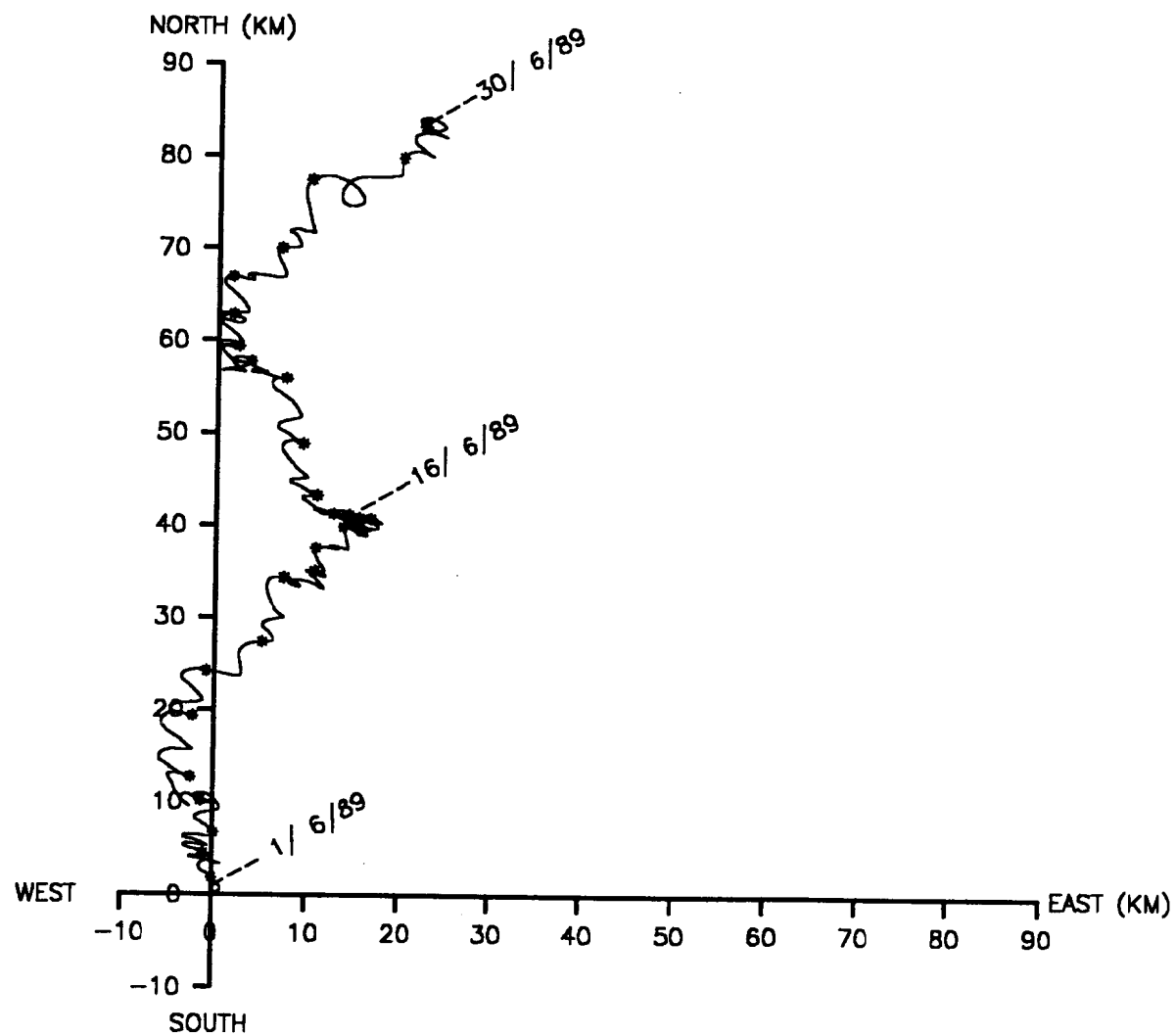
HISTOGRAMS FOR SPEEDS AND DIRECTIONS

Meter no. 1118 Rig no. C53BC Depth of water(m) 52.0
 Start/End 1989/06/01 AT 18:12:00 1989/06/30 AT 11:25:00
 Position 55 29.85N 05 30.52E Meter Height(m) 37.0



VECTOR PLOT

Meter no. 1118 Rig no. C53BC Depth of water(m) 52.0
Start/End 1989/06/01 AT 18:12:00 1989/06/30 AT 11:25:00
Position 55 29.85N 05 30.52E Meter Height(m) 37.0



STATISTICS FOR S41118T C53BCS A

	Mean	Variance	Standard deviation
Eastings	0.0092	0.15812878E-01	0.12574923E+00
Northings	0.0334	0.44154413E-02	0.66448808E-01
Speed	0.1305	0.43992549E-02	0.66326857E-01

Vector mean speed 0.0346
 Vector Mean Direction 15.3

Maximum ten values

Eastings	Northings
----------	-----------

0.376	0.375	0.374	0.369	0.364	0.291	0.281	0.277	0.275	0.272
0.360	0.359	0.357	0.353	0.353	0.271	0.271	0.271	0.266	0.264

Minimum ten values

Eastings	Northings
----------	-----------

-0.228	-0.230	-0.230	-0.230	-0.232	-0.190	-0.192	-0.193	-0.193	-0.201
-0.232	-0.234	-0.234	-0.237	-0.238	-0.201	-0.202	-0.206	-0.206	-0.214

Maximum speeds

0.387	0.378	0.377	0.376	0.376	0.374	0.370	0.370	0.369	0.367
0.367	0.365	0.362	0.360	0.358	0.358	0.357	0.356	0.353	0.350
0.349	0.348	0.343	0.333	0.331	0.329	0.328	0.328	0.326	0.326
0.323	0.323	0.323	0.317	0.310	0.307	0.303	0.302	0.302	0.301
0.298	0.298	0.298	0.297	0.297	0.295	0.293	0.292	0.292	0.292
0.292	0.290	0.289	0.288	0.288	0.286	0.286	0.285	0.284	0.284
0.284	0.284	0.283	0.282	0.282	0.282	0.282	0.282	0.281	0.281
0.280	0.279	0.278	0.278	0.278	0.278	0.277	0.277	0.276	0.275
0.274	0.274	0.273	0.273	0.273	0.272	0.272	0.272	0.272	0.271
0.271	0.271	0.269	0.269	0.268	0.268	0.268	0.268	0.268	0.268

Variance ellipse statistics

Maximum variance 0.1704E-01 Direction -72.7

Minimum variance 0.3190E-02 Direction 17.3

Total variance 0.2023E-01 Ratio of variances 0.1872E+00

Average direction. maxdir -PI/2 to maxdir +PI/2 23.9

Average direction. maxdir +PI/2 to maxdir -PI/2 164.0

STATISTICS FOR S41118T C53BCSF A

	Mean	Variance	Standard deviation
Eastings	0.0048	0.90281130E-03	0.30046813E-01
Northings	0.0314	0.65007666E-03	0.25496595E-01
Speed	0.0440	0.61320909E-03	0.24763059E-01

Vector mean speed 0.0317
 Vector Mean Direction 8.7

Maximum ten values

Eastings

Northings

0.081	0.079	0.069	0.063	0.062	0.083	0.082	0.081	0.080	0.077
0.057	0.057	0.049	0.048	0.045	0.074	0.072	0.072	0.072	0.070

Minimum ten values

Eastings

Northings

-0.028	-0.029	-0.030	-0.033	-0.036	0.003	0.002	0.002	0.001	0.001
-0.038	-0.039	-0.045	-0.048	-0.051	0.000	0.000	-0.001	-0.001	-0.004

Maximum speeds

0.093	0.093	0.093	0.088	0.087	0.082	0.081	0.079	0.078	0.077
0.074	0.074	0.074	0.073	0.073	0.072	0.072	0.072	0.072	0.070
0.068	0.067	0.067	0.064	0.063	0.061	0.061	0.060	0.059	0.058
0.055	0.055	0.055	0.053	0.052	0.051	0.050	0.049	0.047	0.046
0.045	0.045	0.043	0.041	0.041	0.039	0.039	0.039	0.039	0.038
0.038	0.037	0.036	0.036	0.035	0.035	0.033	0.032	0.032	0.031
0.030	0.030	0.029	0.029	0.028	0.027	0.024	0.023	0.022	0.022
0.021	0.020	0.020	0.018	0.017	0.017	0.017	0.016	0.015	0.015
0.015	0.013	0.013	0.012	0.012	0.008	0.008	0.006	0.003	0.001
0.001									

Variance ellipse statistics

Maximum variance 0.9991E-03

Direction 62.3

Minimum variance 0.5538E-03

Direction 152.3

Total variance 0.1553E-02

Ratio of variances 0.5542E+00

Average direction. maxdir -PI/2 to maxdir +PI/2 -34.7

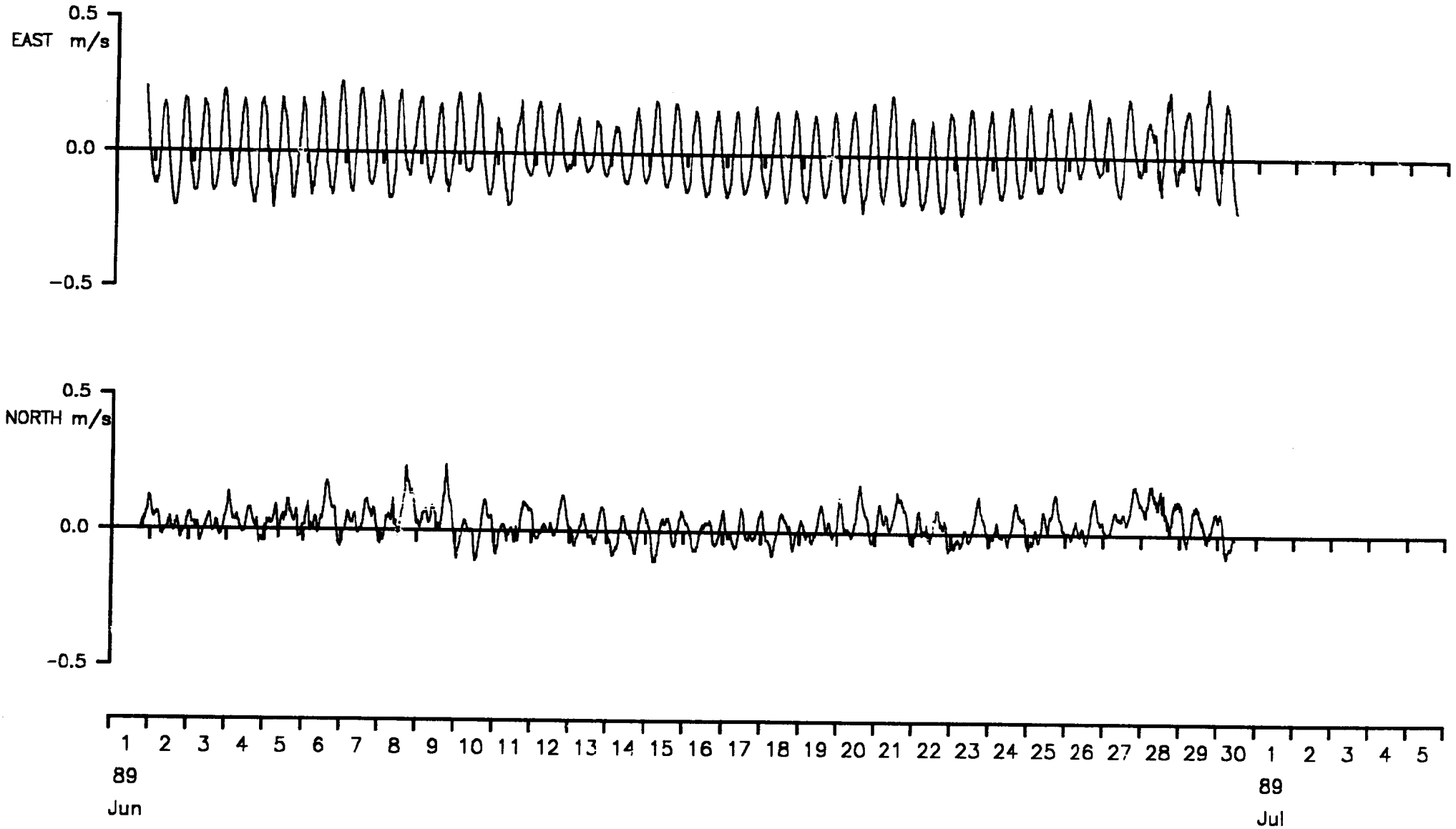
Average direction. maxdir +PI/2 to maxdir -PI/2 225.6

Meter information details for 1112

Rig No	:	C53BC
Meter No	:	1112
Recording interval	:	600.0 seconds
Meter height from bottom	:	27.0 m
Position of meter on rig	:	MT
Meter type	:	S4
Meter started	:	31-MAY-89 20:30:00
Meter stopped	:	30-JUNE-89 20:10:00
Period switched on	:	30.0 days
Period of good data	:	28.7 days
Total number of scans	:	4135
Timing error	:	None
Comments	:	Good record obtained

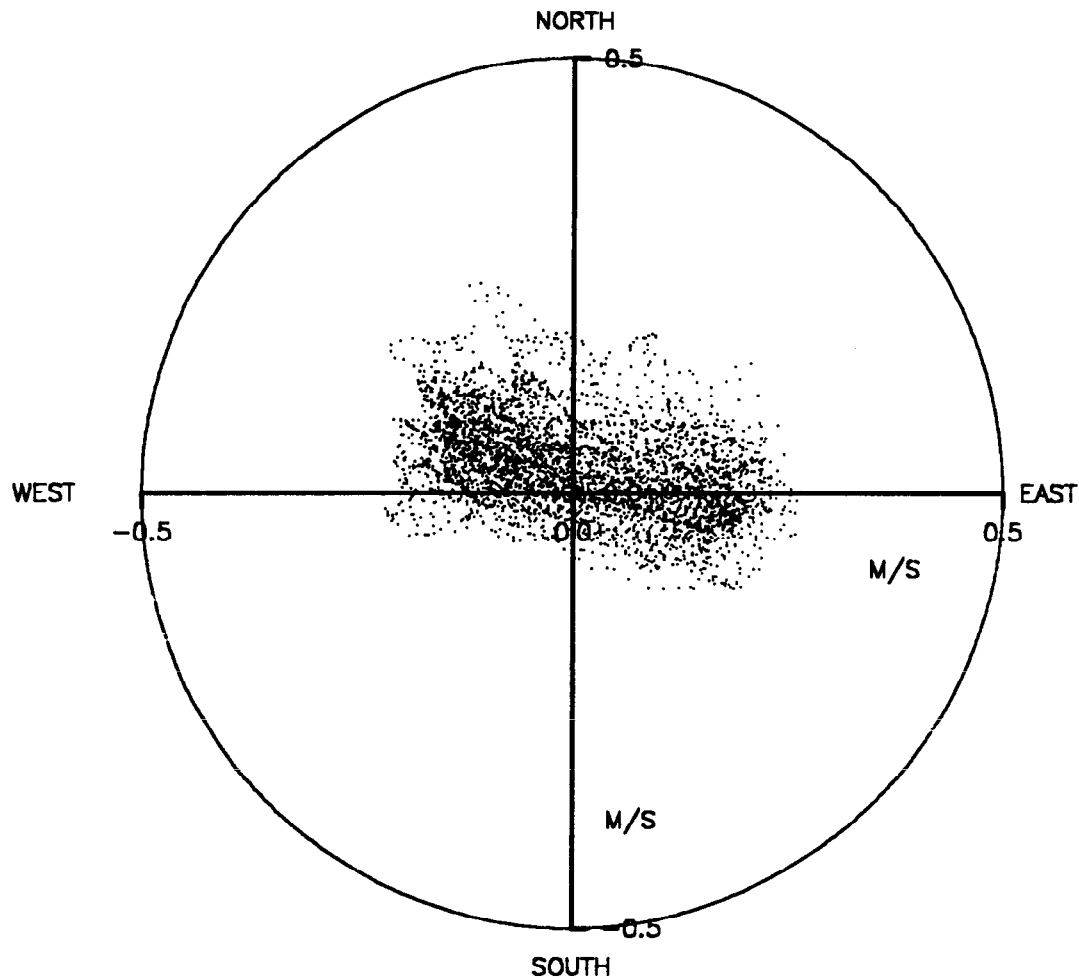
VELOCITY COMPONENT TIME SERIES PLOT

Meter no. 1112 Rig no. C53BC Depth of water(m) 52.0
Start/End 1989/06/01 AT 18:12:00 1989/06/30 AT 11:25:00
Position 55 29.85N 05 30.52E Meter Height(m) 27.0



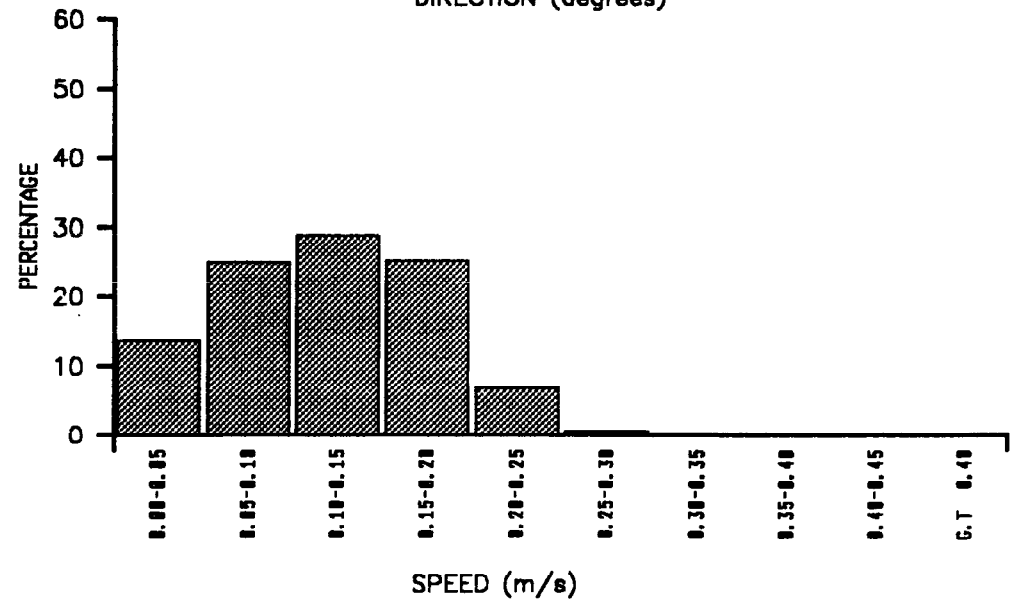
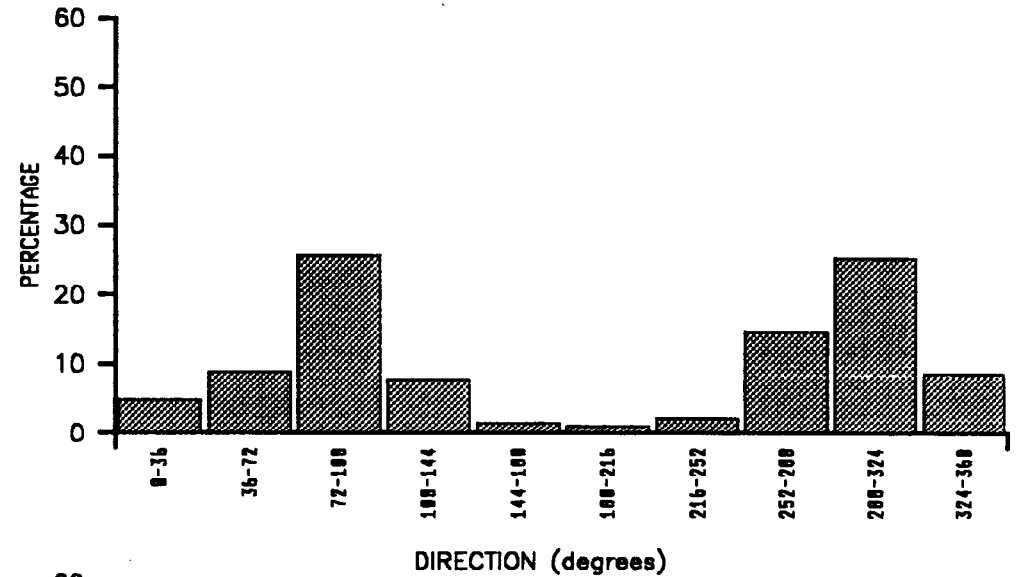
SCATTER PLOT

Meter no. 1112 Rig no. C53BC Depth of water(m) 52.0
 Start/End 1989/06/01 AT 18:12:00 1989/06/30 AT 11:25:00
 Position 55 29.85N 05 30.52E Meter Height(m) 27.0



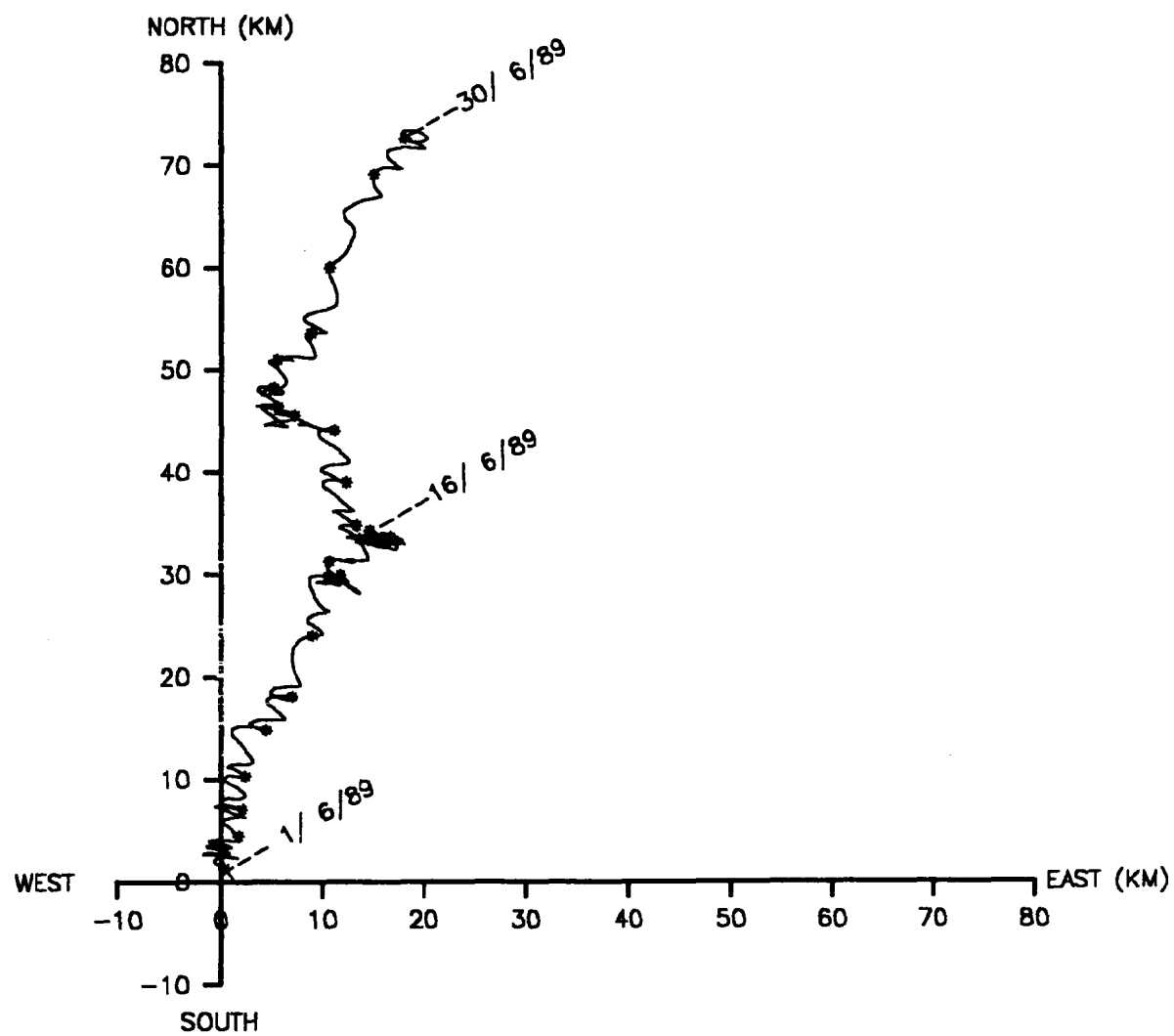
HISTOGRAMS FOR SPEEDS AND DIRECTIONS

Meter no. 1112 Rig no. C53BC Depth of water(m) 52.0
 Start/End 1989/06/01 AT 18:12:00 1989/06/30 AT 11:25:00
 Position 55 29.85N 05 30.52E Meter Height(m) 27.0



VECTOR PLOT

Meter no. 1112 Rig no. C53BC Depth of water(m) 52.0
Start/End 1989/06/01 AT 18:12:00 1989/06/30 AT 11:25:00
Position 55 29.85N 05 30.52E Meter Height(m) 27.0



STATISTICS FOR S41112MT C53BCS A

	Mean	Variance	Standard deviation
Eastings	0.0076	0.13427559E-01	0.11587733E+00
Northings	0.0291	0.29440841E-02	0.54259412E-01
Speed	0.1185	0.32350936E-02	0.56877878E-01

Vector mean speed 0.0301
Vector Mean Direction 14.6

Maximum ten values									
Eastings					Northings				
0.261	0.259	0.259	0.255	0.254	0.241	0.238	0.236	0.230	0.227
0.254	0.253	0.253	0.247	0.246	0.227	0.221	0.219	0.215	0.206

Minimum ten values									
Eastings					Northings				
-0.208	-0.208	-0.209	-0.209	-0.211	-0.107	-0.109	-0.109	-0.109	-0.110
-0.212	-0.213	-0.215	-0.215	-0.217	-0.110	-0.111	-0.111	-0.111	-0.111

Maximum speeds									
0.272	0.268	0.267	0.266	0.264	0.263	0.261	0.260	0.260	0.259
0.257	0.255	0.255	0.254	0.254	0.253	0.252	0.251	0.250	0.250
0.249	0.249	0.249	0.248	0.248	0.246	0.246	0.246	0.246	0.245
0.242	0.242	0.241	0.241	0.241	0.240	0.239	0.239	0.238	0.237
0.236	0.235	0.234	0.234	0.234	0.234	0.233	0.232	0.232	0.232
0.232	0.232	0.232	0.232	0.231	0.231	0.231	0.231	0.230	0.230
0.230	0.230	0.230	0.229	0.229	0.229	0.228	0.228	0.228	0.228
0.228	0.227	0.226	0.226	0.226	0.226	0.226	0.226	0.225	0.225
0.225	0.225	0.224	0.224	0.224	0.224	0.224	0.224	0.224	0.224
0.223	0.223	0.223	0.223	0.223	0.222	0.222	0.222	0.222	0.222

Variance ellipse statistics

Maximum variance 0.1409E-01	Direction	-76.3
Minimum variance 0.2277E-02	Direction	13.7
Total variance 0.1637E-01	Ratio of variances	0.1615E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		24.6
Average direction. maxdir +PI/2 to maxdir -PI/2		164.8

STATISTICS FOR S41112MT C53BCSF A

	Mean	Variance	Standard deviation
Eastings	0.0044	0.47098496E-03	0.21702193E-01
Northings	0.0243	0.53230207E-03	0.23071669E-01
Speed	0.0344	0.42673526E-03	0.20657565E-01

Vector mean speed 0.0247
 Vector Mean Direction 10.2

Maximum ten values									
Eastings					Northings				
0.042	0.040	0.040	0.039	0.037	0.089	0.086	0.082	0.071	0.067
0.036	0.034	0.033	0.033	0.033	0.058	0.057	0.056	0.054	0.054

Minimum ten values									
Eastings					Northings				
-0.017	-0.019	-0.023	-0.026	-0.026	-0.002	-0.002	-0.003	-0.003	-0.005
-0.029	-0.041	-0.041	-0.049	-0.050	-0.005	-0.005	-0.005	-0.007	-0.008

Maximum speeds									
0.094	0.089	0.088	0.074	0.073	0.060	0.059	0.059	0.059	0.058
0.057	0.057	0.057	0.056	0.056	0.055	0.054	0.052	0.052	0.051
0.051	0.050	0.050	0.049	0.049	0.048	0.048	0.048	0.047	0.044
0.043	0.043	0.043	0.043	0.042	0.042	0.042	0.041	0.041	0.041
0.037	0.037	0.034	0.034	0.033	0.032	0.030	0.029	0.027	0.026
0.026	0.025	0.024	0.023	0.023	0.022	0.022	0.022	0.021	0.021
0.020	0.020	0.020	0.020	0.019	0.019	0.018	0.018	0.017	0.017
0.016	0.016	0.016	0.015	0.014	0.014	0.013	0.012	0.012	0.012
0.012	0.011	0.010	0.010	0.008	0.008	0.008	0.007	0.005	0.004
0.003									

Variance ellipse statistics

Maximum variance 0.6922E-03	Direction	40.4
Minimum variance 0.3111E-03	Direction	130.4
Total variance 0.1003E-02	Ratio of variances	0.4494E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		-16.1
Average direction. maxdir +PI/2 to maxdir -PI/2		221.8

Meter information details for 1113

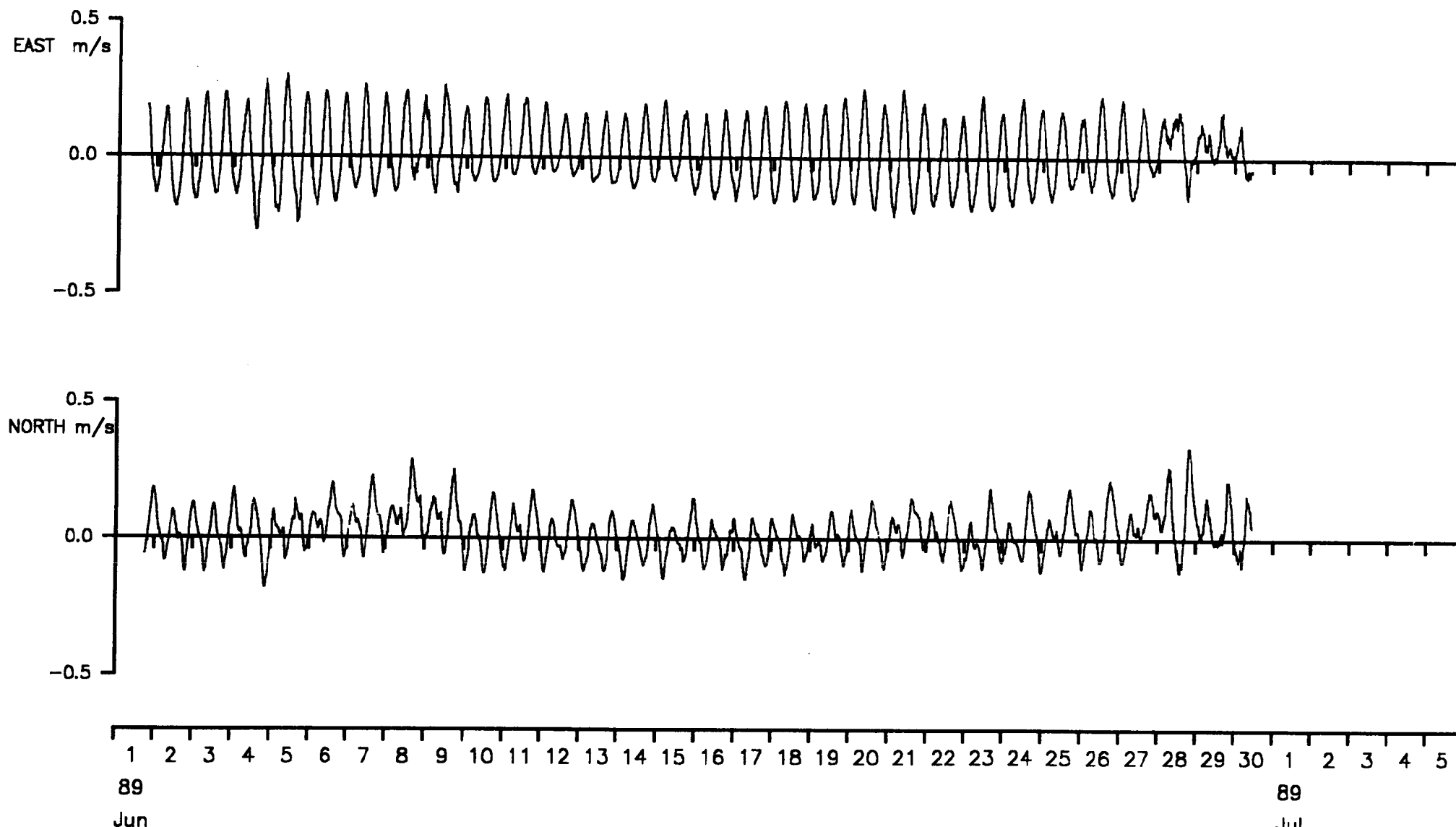
Rig No	:	C53BC
Meter No	:	1113
Recording interval	:	600.0 seconds
Meter height from bottom	:	15.0 m
Position of meter on rig	:	MB
Meter type	:	S4
Meter started	:	31-MAY-89 21:30:00
Meter stopped	:	30-JUNE-89 12:00:00
Period switched on	:	29.6 days
Period of good data	:	28.7 days
Total number of scans	:	4135
Timing error	:	None
Comments	:	Good record obtained

VELOCITY COMPONENT TIME SERIES PLOT

Meter no. 1113 Rig no. C53BC Depth of water(m) 52.0

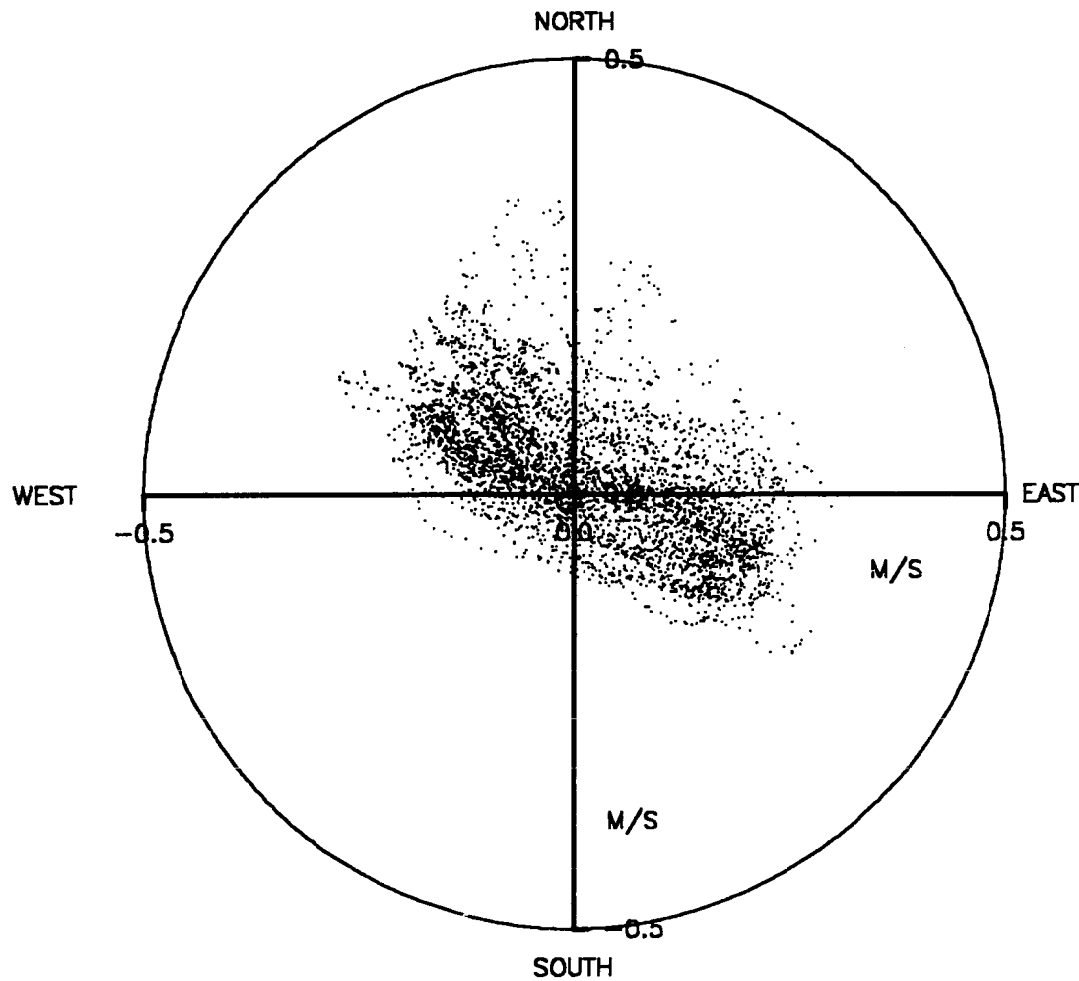
Start/End 1989/06/01 AT 18:12:00 1989/06/30 AT 11:25:00

Position 55 29.85N 05 30.52E Meter Height(m) 15.0



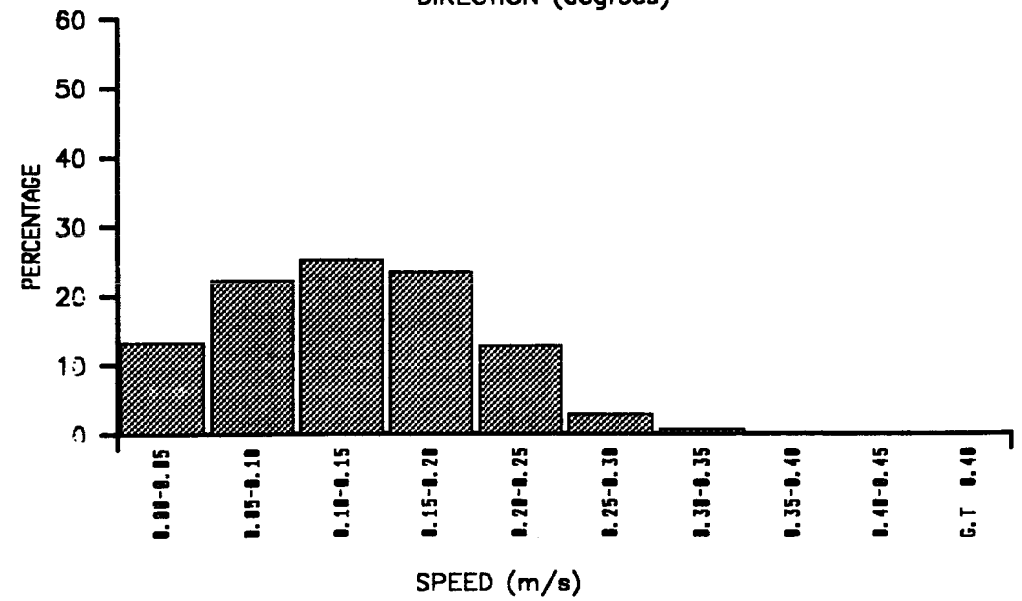
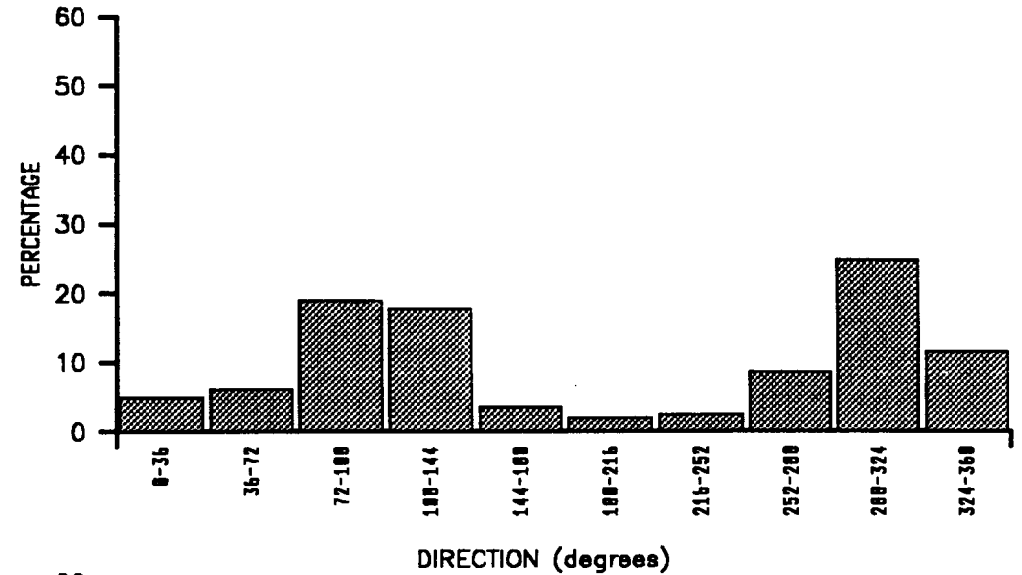
SCATTER PLOT

Meter no. 1113 Rig no. C53BC Depth of water(m) 52.0
 Start/End 1989/06/01 AT 18:12:00 1989/06/30 AT 11:25:00
 Position 55 29.85N 05 30.52E Meter Height(m) 15.0



HISTOGRAMS FOR SPEEDS AND DIRECTIONS

Meter no. 1113 Rig no. C53BC Depth of water(m) 52.0
 Start/End 1989/06/01 AT 18:12:00 1989/06/30 AT 11:25:00
 Position 55 29.85N 05 30.52E Meter Height(m) 15.0

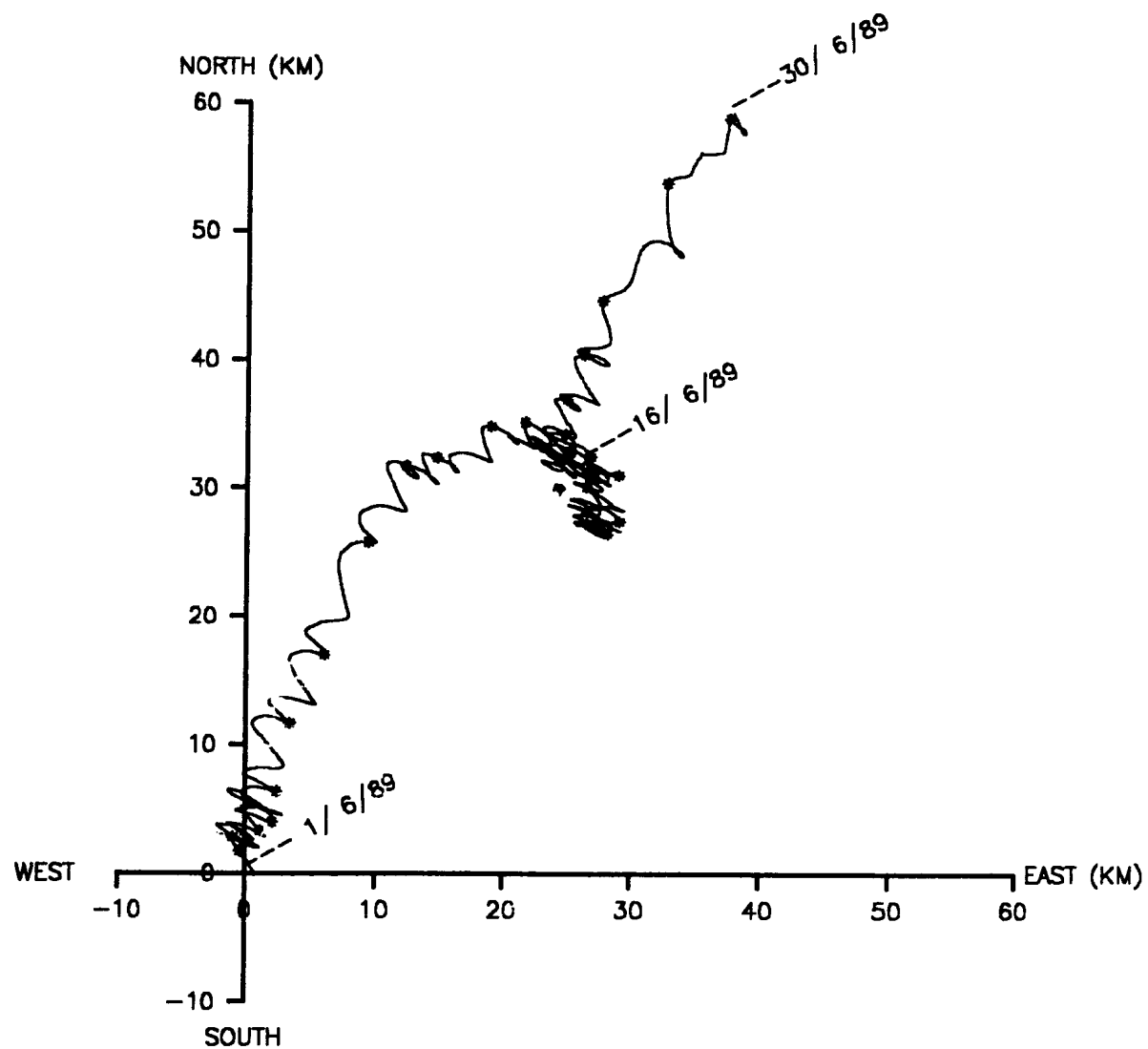


VECTOR PLOT

Meter no. 1113 Rig no. C53BC Depth of water(m) 52.0

Start/End 1989/06/01 AT 18:12:00 1989/06/30 AT 11:25:00

Position 55 29.85N 05 30.52E Meter Height(m) 15.0



STATISTICS FOR S41113MB C53BCS A

	Mean	Variance	Standard deviation
Eastings	0.0153	0.13873357E-01	0.11778522E+00
Northings	0.0239	0.66336282E-02	0.81447065E-01
Speed	0.1302	0.43459646E-02	0.65923929E-01

Vector mean speed 0.0284
Vector Mean Direction 32.6

Maximum ten values									
Eastings					Northings				
0.299	0.288	0.281	0.277	0.276	0.337	0.337	0.336	0.331	0.325
0.273	0.269	0.267	0.265	0.265	0.324	0.323	0.321	0.318	0.316

Minimum ten values									
Eastings					Northings				
-0.246	-0.251	-0.255	-0.261	-0.261	-0.158	-0.159	-0.169	-0.172	-0.173
-0.264	-0.265	-0.267	-0.271	-0.271	-0.176	-0.176	-0.182	-0.183	-0.184

Maximum speeds									
0.345	0.343	0.338	0.336	0.330	0.326	0.325	0.324	0.319	0.318
0.318	0.316	0.316	0.316	0.315	0.313	0.313	0.312	0.310	0.310
0.303	0.302	0.301	0.301	0.300	0.300	0.300	0.299	0.298	0.295
0.295	0.294	0.293	0.293	0.291	0.290	0.288	0.288	0.288	0.286
0.285	0.284	0.283	0.282	0.281	0.281	0.279	0.279	0.278	0.278
0.275	0.275	0.275	0.275	0.274	0.274	0.274	0.273	0.273	0.273
0.273	0.272	0.271	0.271	0.270	0.269	0.269	0.269	0.268	0.268
0.268	0.267	0.267	0.267	0.266	0.266	0.265	0.265	0.265	0.264
0.264	0.264	0.264	0.264	0.263	0.263	0.263	0.263	0.262	0.262
0.262	0.261	0.261	0.261	0.261	0.260	0.260	0.260	0.259	0.259

Variance ellipse statistics

Maximum variance 0.1717E-01	Direction	-60.8
Minimum variance 0.3339E-02	Direction	29.2
Total variance 0.2051E-01	Ratio of variances	0.1945E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		17.1
Average direction. maxdir +PI/2 to maxdir -PI/2		167.3

STATISTICS FOR S41113MB C53BCSF A

	Mean	Variance	Standard deviation
Eastings	0.0133	0.38403878E-03	0.19596908E-01
Northings	0.0180	0.99101989E-03	0.31480473E-01
Speed	0.0349	0.65296213E-03	0.25553118E-01

Vector mean speed 0.0224
 Vector Mean Direction 36.6

Maximum ten values									
Eastings					Northings				
0.055	0.053	0.053	0.051	0.050	0.108	0.104	0.101	0.091	0.088
0.048	0.047	0.046	0.044	0.040	0.072	0.070	0.065	0.063	0.062

Minimum ten values									
Eastings					Northings				
-0.010	-0.011	-0.013	-0.013	-0.015	-0.014	-0.017	-0.018	-0.018	-0.019
-0.018	-0.020	-0.021	-0.024	-0.025	-0.021	-0.022	-0.023	-0.024	-0.024

Maximum speeds									
0.119	0.116	0.110	0.103	0.095	0.081	0.079	0.066	0.066	0.066
0.064	0.063	0.062	0.061	0.061	0.059	0.057	0.057	0.053	0.051
0.048	0.048	0.046	0.045	0.042	0.041	0.041	0.040	0.040	0.038
0.038	0.037	0.037	0.037	0.037	0.036	0.036	0.033	0.033	0.031
0.031	0.029	0.028	0.028	0.028	0.027	0.027	0.025	0.024	0.024
0.024	0.024	0.024	0.024	0.022	0.022	0.022	0.022	0.022	0.021
0.020	0.019	0.018	0.017	0.017	0.017	0.016	0.016	0.016	0.015
0.015	0.015	0.014	0.014	0.014	0.014	0.014	0.014	0.013	0.013
0.012	0.012	0.012	0.011	0.009	0.009	0.009	0.008	0.005	0.004
0.001									

Variance ellipse statistics

Maximum variance 0.1094E-02	Direction	20.9
Minimum variance 0.2810E-03	Direction	110.9
Total variance 0.1375E-02	Ratio of variances	0.2568E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		14.3
Average direction. maxdir +PI/2 to maxdir -PI/2		161.3

Meter information details for 9069

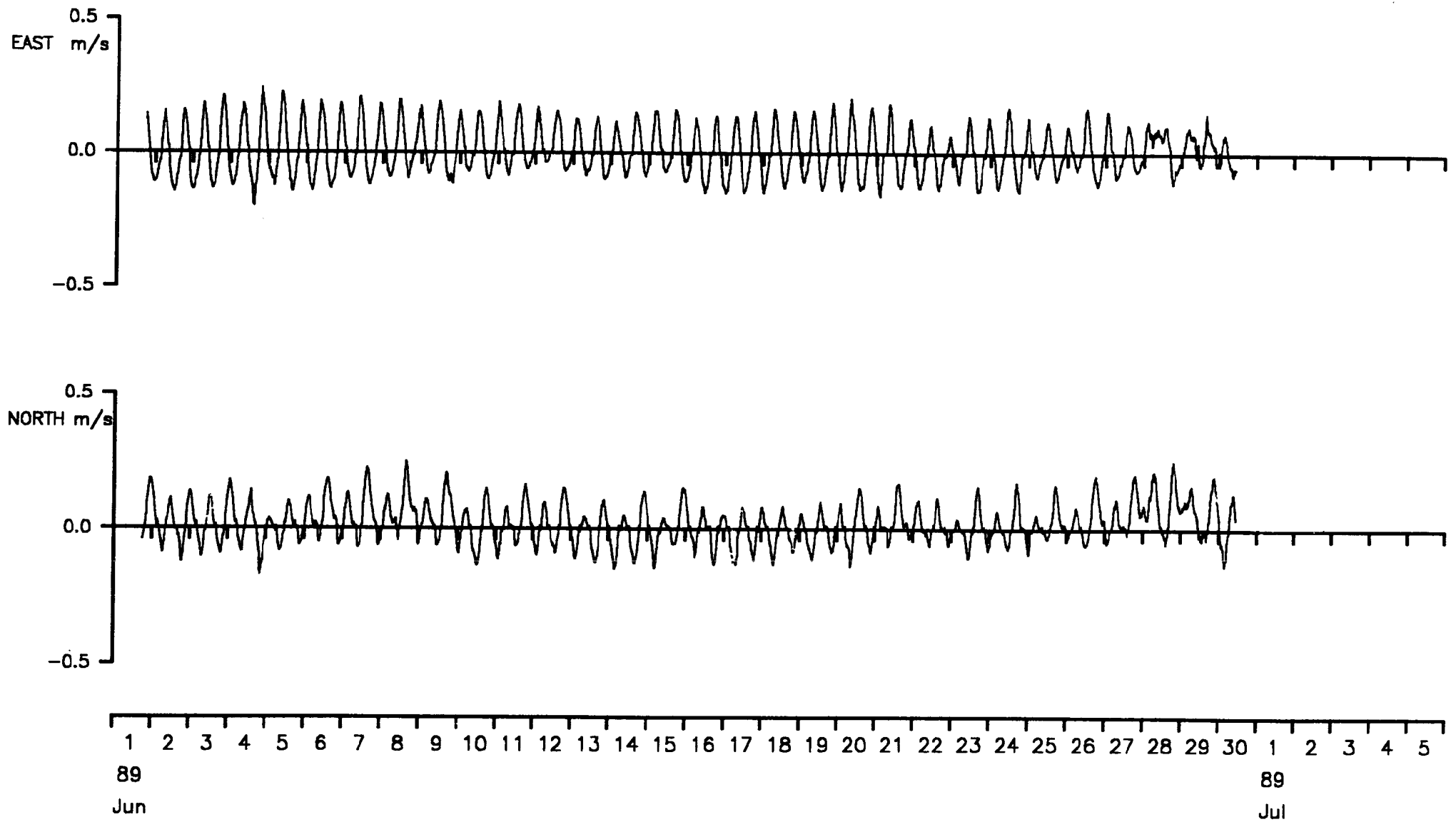
Rig No	:	C53BC
Meter No	:	9069
Recording interval	:	600.0 seconds
Meter height from bottom	:	7.0 m
Position of meter on rig	:	B
Meter type	:	AS
Meter started	:	01-JUNE-89 16:40:00
Meter stopped	:	30-JUNE-89 21:50:00
Period switched on	:	29.2 days
Period of good data	:	28.7 days
Total number of scans	:	4135
Timing error	:	None
Comments	:	Spikes present in parameter data and temperature values are a few degrees higher than CTD cast comparisons

VELOCITY COMPONENT TIME SERIES PLOT

Meter no. 9069 Rig no. C53BC Depth of water(m) 52.0

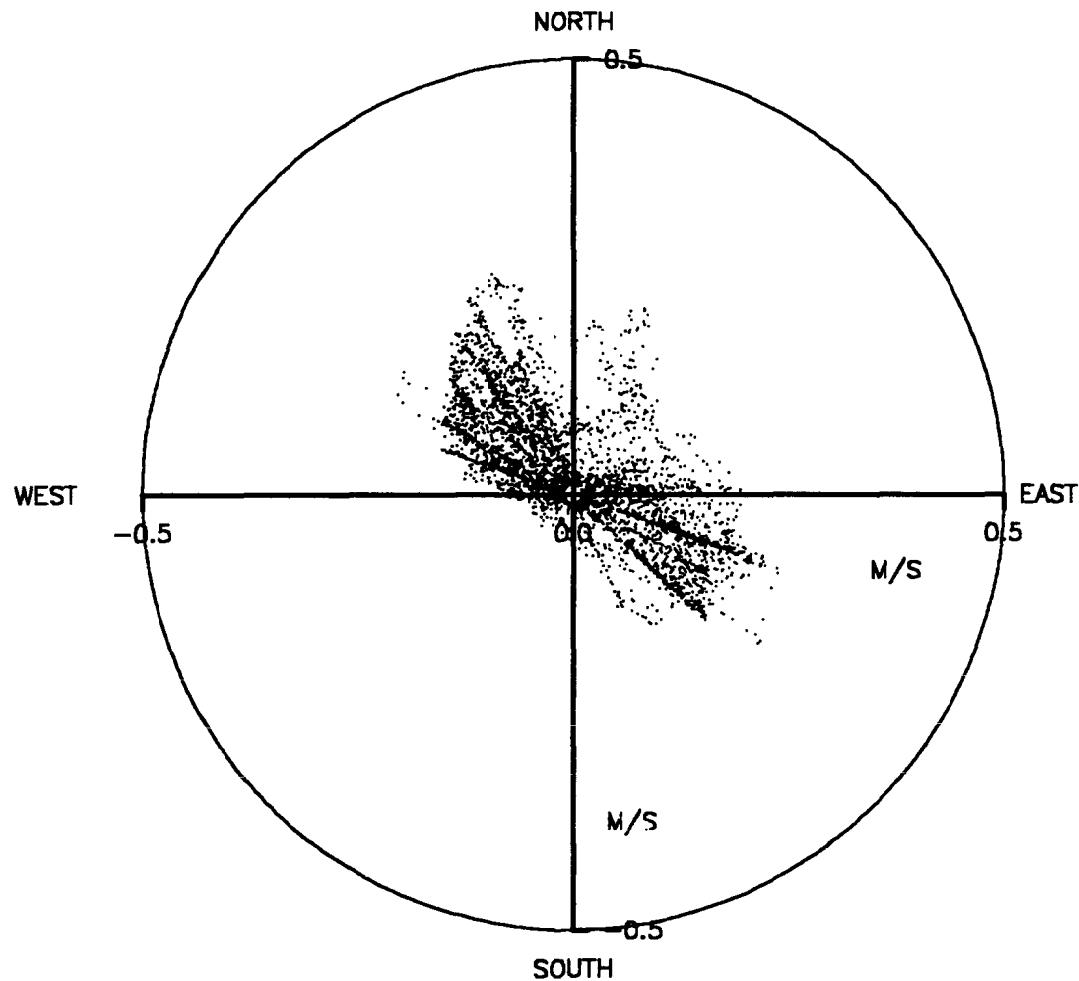
Start/End 1989/06/01 AT 18:12:00 1989/06/30 AT 11:25:00

Position 55 29.85N 05 30.52E Meter Height(m) 7.0



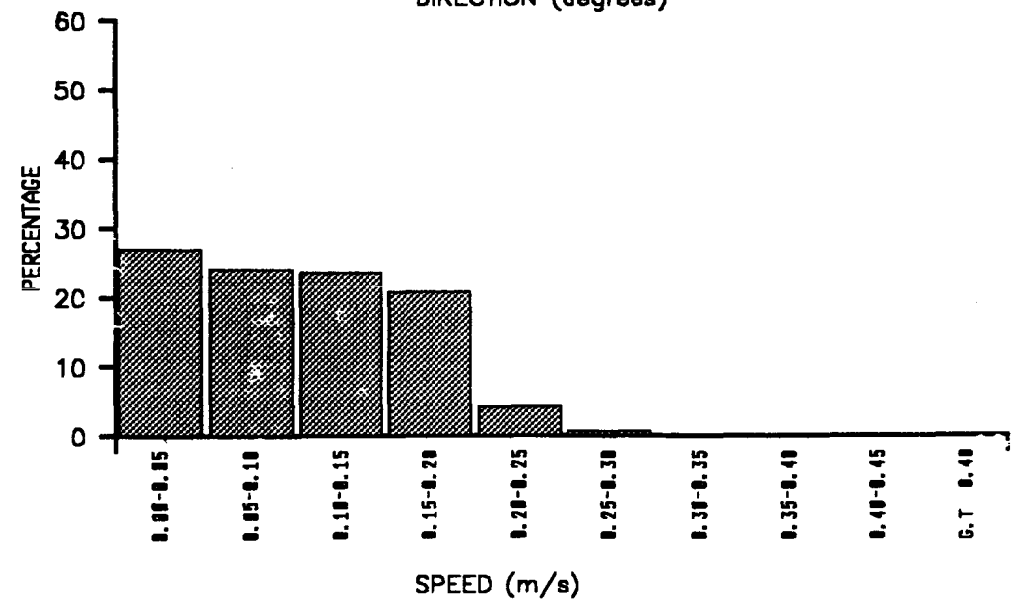
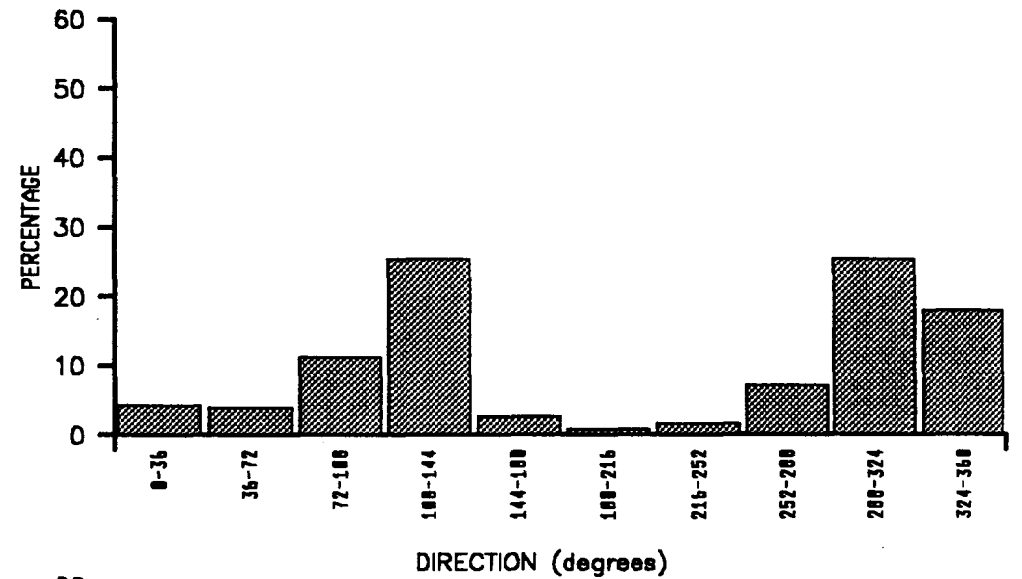
SCATTER PLOT

Meter no. 9069 Rig no. C53BC Depth of water(m) 52.0
 Start/End 1989/06/01 AT 18:12:00 1989/06/30 AT 11:25:00
 Position 55 29.85N 05 30.52E Meter Height(m) 7.0



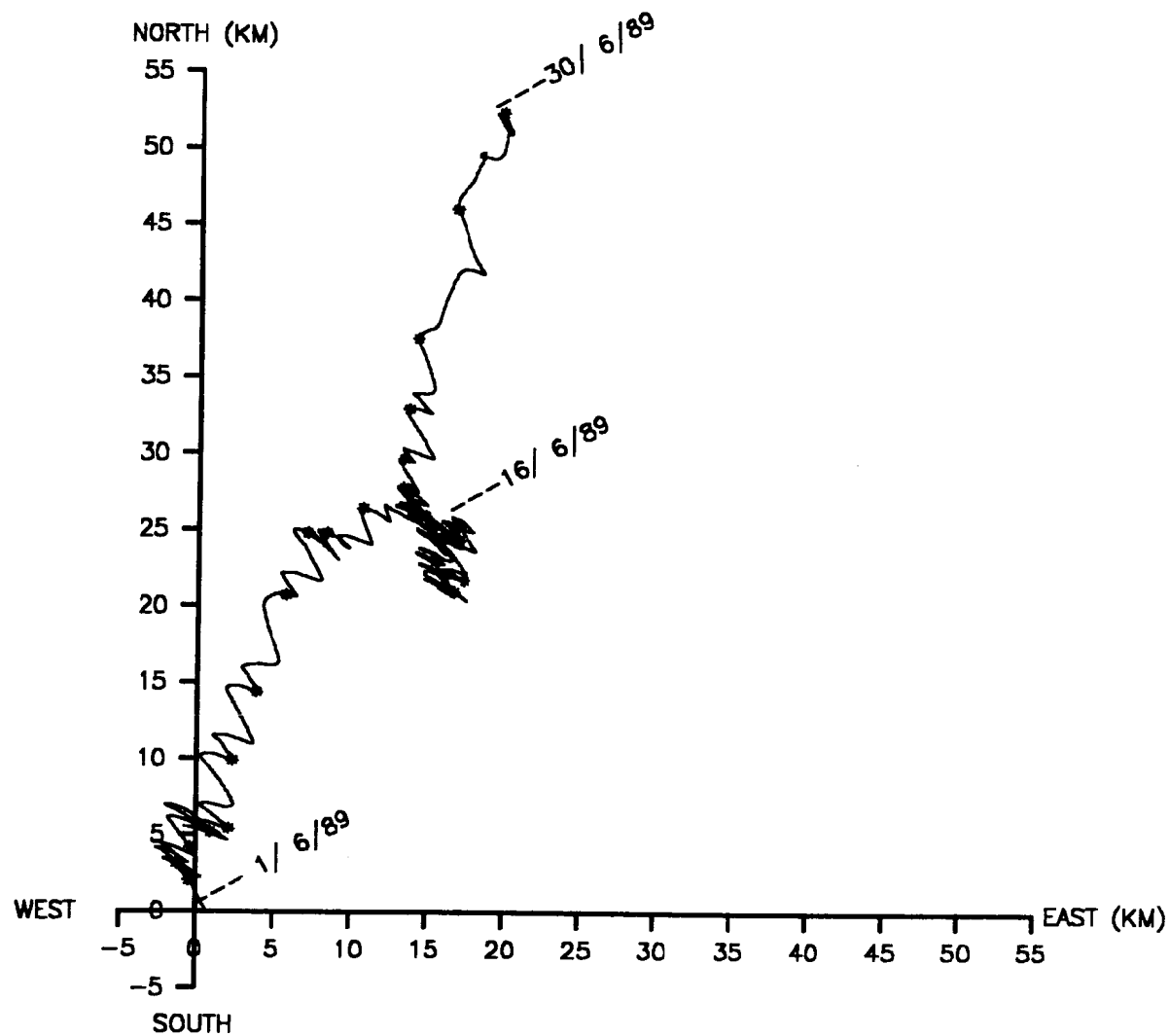
HISTOGRAMS FOR SPEEDS AND DIRECTIONS

Meter no. 9069 Rig no. C53BC Depth of water(m) 52.0
 Start/End 1989/06/01 AT 18:12:00 1989/06/30 AT 11:25:00
 Position 55 29.85N 05 30.52E Meter Height(m) 7.0



VECTOR PLOT

Meter no. 9069 Rig no. C53BC Depth of water(m) 52.0
Start/End 1989/06/01 AT 18:12:00 1989/06/30 AT 11:25:00
Position 55 29.85N 05 30.52E Meter Height(m) 7.0

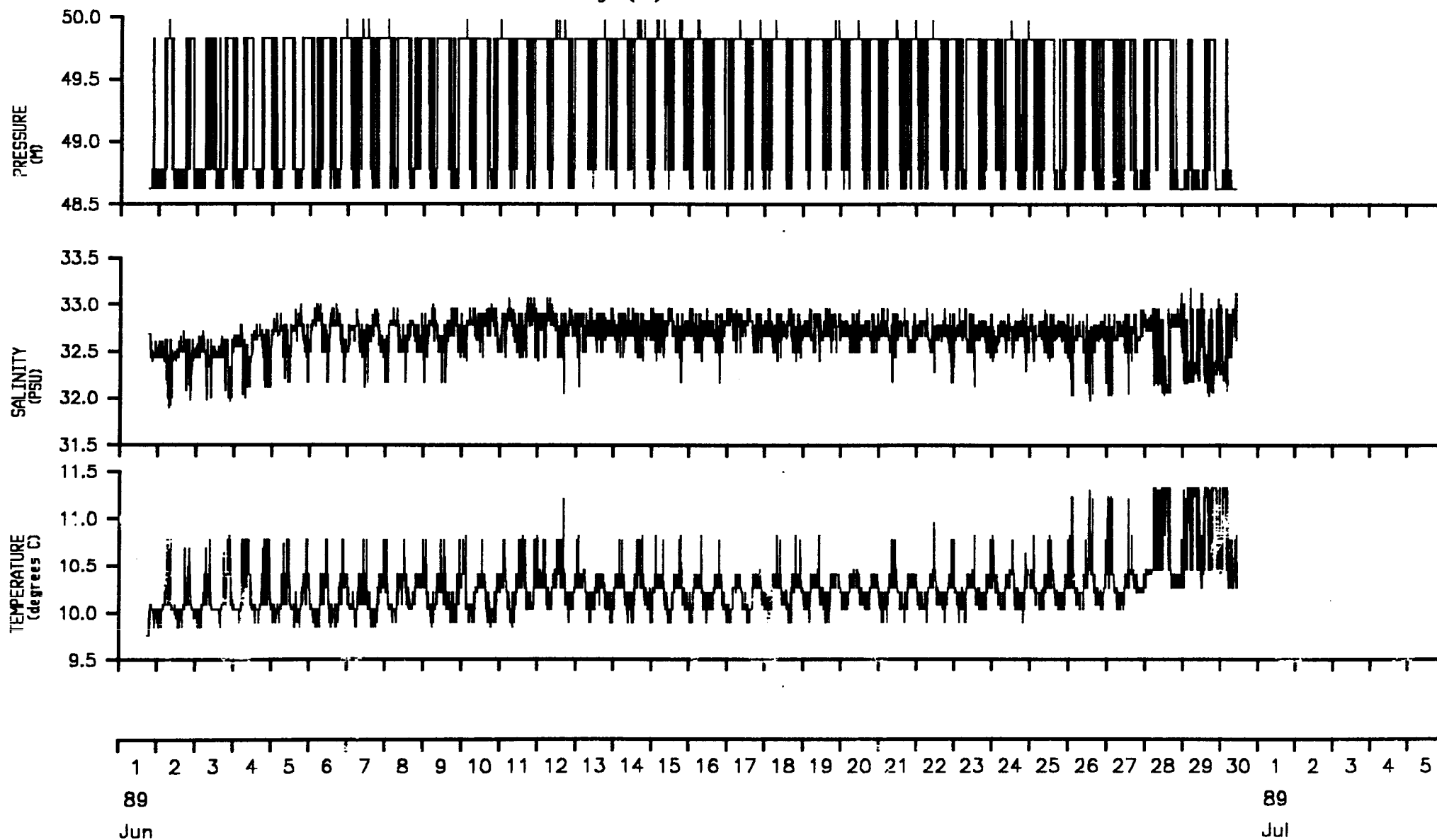


TEMPERATURE,SALINITY AND PRESSURE TIME SERIES PLOTS

Meter no. 9069 Rig no. C53BC Depth of water(m) 52.0

Start/End 1989/06/01 AT 18:12:00 1989/06/30 AT 11:25:00

Position 55 29.85N 05 30.52E Meter Height(m) 7.0



STATISTICS FOR AS9069B C53BCS A

	Mean	Variance	Standard deviation
Eastings	0.0078	0.79289973E-02	0.89044929E-01
Northings	0.0211	0.54985061E-02	0.74151933E-01
Speed	0.1008	0.37814330E-02	0.61493356E-01

Vector mean speed 0.0225
Vector Mean Direction 20.3

Maximum ten values									
Eastings					Northings				
0.238	0.237	0.231	0.223	0.222	0.253	0.248	0.246	0.245	0.243
0.221	0.221	0.220	0.217	0.217	0.241	0.240	0.240	0.239	0.239

Minimum ten values									
Eastings					Northings				
-0.159	-0.160	-0.169	-0.178	-0.190	-0.144	-0.144	-0.145	-0.146	-0.148
-0.195	-0.195	-0.196	-0.197	-0.202	-0.149	-0.157	-0.161	-0.169	-0.172

Maximum speeds									
0.275	0.275	0.270	0.267	0.264	0.264	0.264	0.261	0.261	0.258
0.258	0.255	0.255	0.255	0.255	0.255	0.255	0.255	0.252	0.252
0.252	0.252	0.252	0.252	0.249	0.249	0.246	0.246	0.246	0.246
0.246	0.243	0.243	0.243	0.241	0.241	0.241	0.241	0.238	0.238
0.235	0.235	0.235	0.235	0.235	0.232	0.232	0.232	0.232	0.232
0.232	0.232	0.232	0.232	0.232	0.229	0.229	0.229	0.229	0.229
0.229	0.229	0.226	0.226	0.226	0.226	0.226	0.226	0.226	0.226
0.226	0.223	0.223	0.223	0.223	0.223	0.223	0.223	0.223	0.223
0.223	0.223	0.220	0.220	0.220	0.220	0.220	0.220	0.220	0.220
0.217	0.217	0.217	0.217	0.217	0.217	0.217	0.217	0.217	0.217

Variance ellipse statistics

Maximum variance 0.1172E-01	Direction	-52.0
Minimum variance 0.1712E-02	Direction	38.0
Total variance 0.1343E-01	Ratio of variances	0.1461E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		12.8
Average direction. maxdir +PI/2 to maxdir -PI/2		164.0

STATISTICS FOR AS9069B C53BCSF A

	Mean	Variance	Standard deviation
Eastings	0.0076	0.20496396E-03	0.14316559E-01
Northings	0.0140	0.61836210E-03	0.24866883E-01
Speed	0.0281	0.28314791E-03	0.16826998E-01

Vector mean speed 0.0159
 Vector Mean Direction 28.4

Maximum ten values

Eastings

Northings

0.035	0.035	0.033	0.032	0.031	0.071	0.070	0.068	0.065	0.060
0.030	0.030	0.028	0.027	0.027	0.057	0.054	0.054	0.050	0.049

Minimum ten values

Eastings

Northings

-0.012	-0.016	-0.016	-0.016	-0.016	-0.016	-0.016	-0.016	-0.018	-0.018
-0.019	-0.019	-0.020	-0.021	-0.023	-0.022	-0.023	-0.023	-0.023	-0.025

Maximum speeds

0.078	0.075	0.075	0.069	0.066	0.060	0.055	0.054	0.053	0.053
0.053	0.050	0.049	0.048	0.047	0.042	0.041	0.041	0.040	0.038
0.038	0.037	0.037	0.036	0.036	0.035	0.034	0.034	0.033	0.033
0.030	0.030	0.029	0.029	0.028	0.027	0.026	0.026	0.026	0.025
0.025	0.025	0.025	0.024	0.024	0.024	0.024	0.023	0.023	0.022
0.022	0.022	0.022	0.022	0.021	0.020	0.020	0.019	0.018	0.018
0.017	0.017	0.016	0.016	0.016	0.016	0.016	0.015	0.015	0.015
0.014	0.014	0.014	0.014	0.013	0.013	0.012	0.012	0.012	0.012
0.012	0.011	0.010	0.010	0.010	0.010	0.009	0.009	0.008	0.008
0.008									

Variance ellipse statistics

Maximum variance 0.6433E-03

Direction 13.4

Minimum variance 0.1800E-03

Direction 103.4

Total variance 0.8233E-03

Ratio of variances 0.2798E+00

Average direction. maxdir -PI/2 to maxdir +PI/2

4.4

Average direction. maxdir +PI/2 to maxdir -PI/2

153.8

STICK TIME SERIES PLOT

Rig no. C53BC Depth of water(m) 52.0

Start/End 1989/06/01 AT 18:12:00 1989/06/30 AT 11:25:00

Position 55 29.85N 05 30.52E

Filtered Series Scale 0.1 m/s

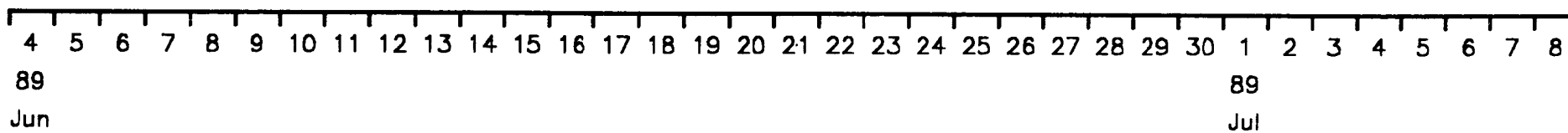
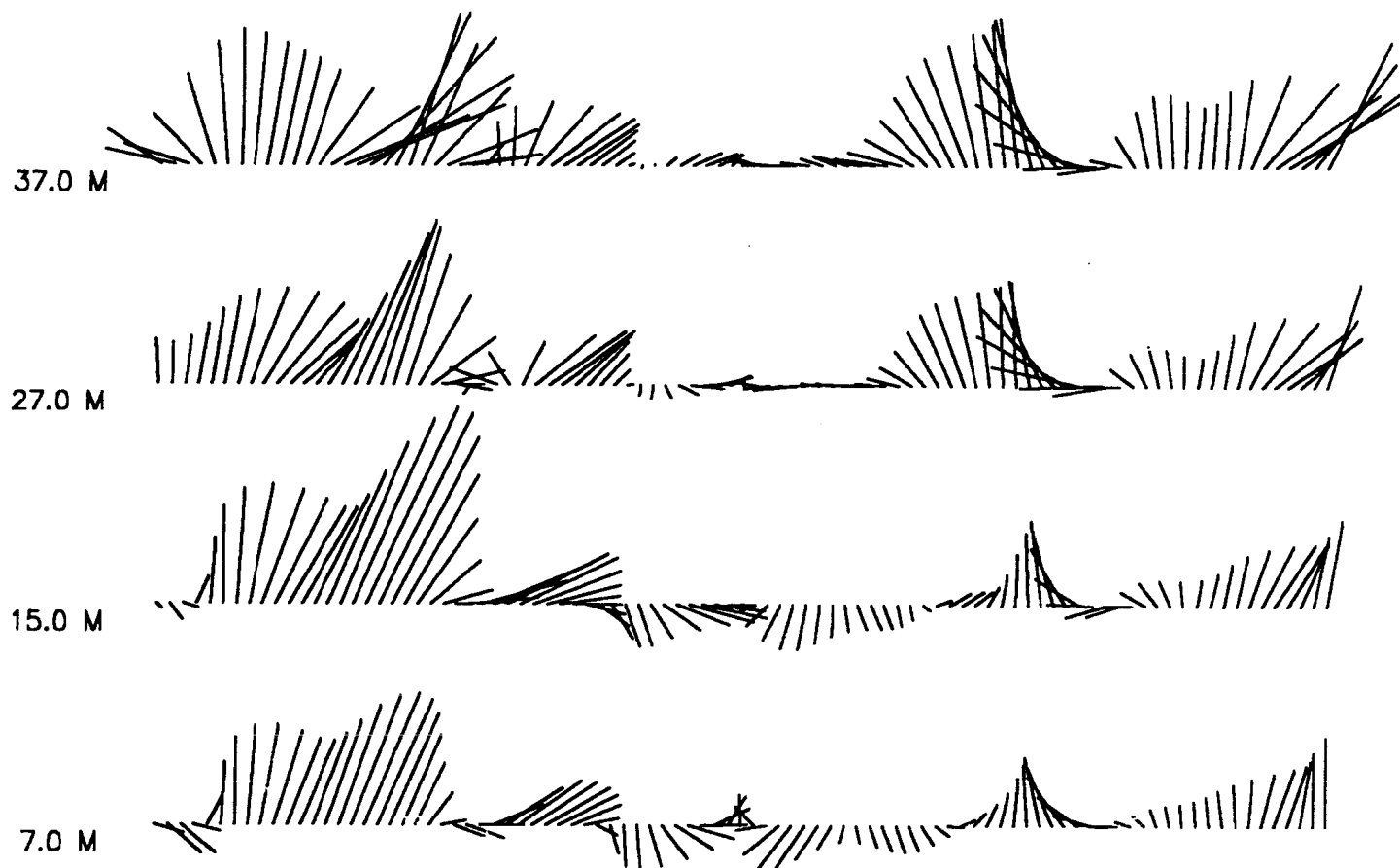
Meter No. Meter Height

9069 7.0 M

1113 15.0 M

1112 27.0 M

1118 37.0 M



Rig information details for C55BC

Position Latitude	:	55 30.13N
Position Longitude	:	05 30.31E
Water depth	:	52.0 m
Deployed on cruise	:	C55
Recovered on cruise	:	C57
Site name identification	:	B
Magnetic deviation	:	2.8 degrees west
Rig deployed on	:	30-JUNE-89 13:01:00
Rig recovered on	:	30-JULY-89 17:04:00
Period of deployment	:	30.2 days
Comments	:	Launch and recovery successful

Meter information details for 1264

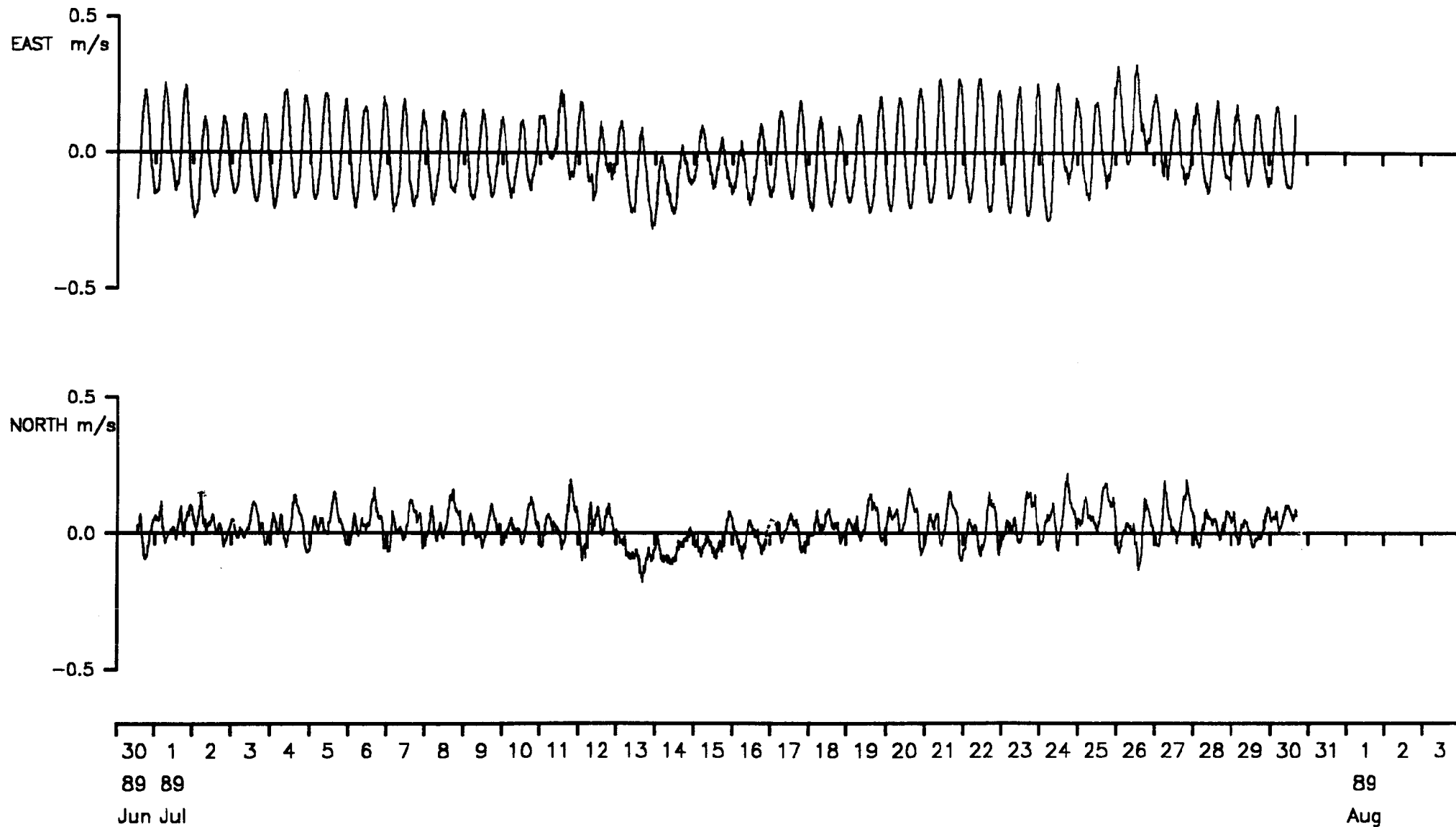
Rig No	:	C55BC
Meter No	:	1264
Recording interval	:	600.0 seconds
Meter height from bottom	:	37.0 m
Position of meter on rig	:	T
Meter type	:	S4
Meter started	:	28-JUNE-89 20:50:00
Meter stopped	:	30-JULY-89 17:21:00
Period switched on	:	31.9 days
Period of good data	:	30.2 days
Total number of scans	:	4344
Timing error	:	60 seconds slow
Comments	:	Hourly time stamp has jumped by one minute at: (1) 18-JULY-89 19:50 to 20:51

VELOCITY COMPONENT TIME SERIES PLOT

Meter no. 1264 Rig no. C55BC Depth of water(m) 52.0

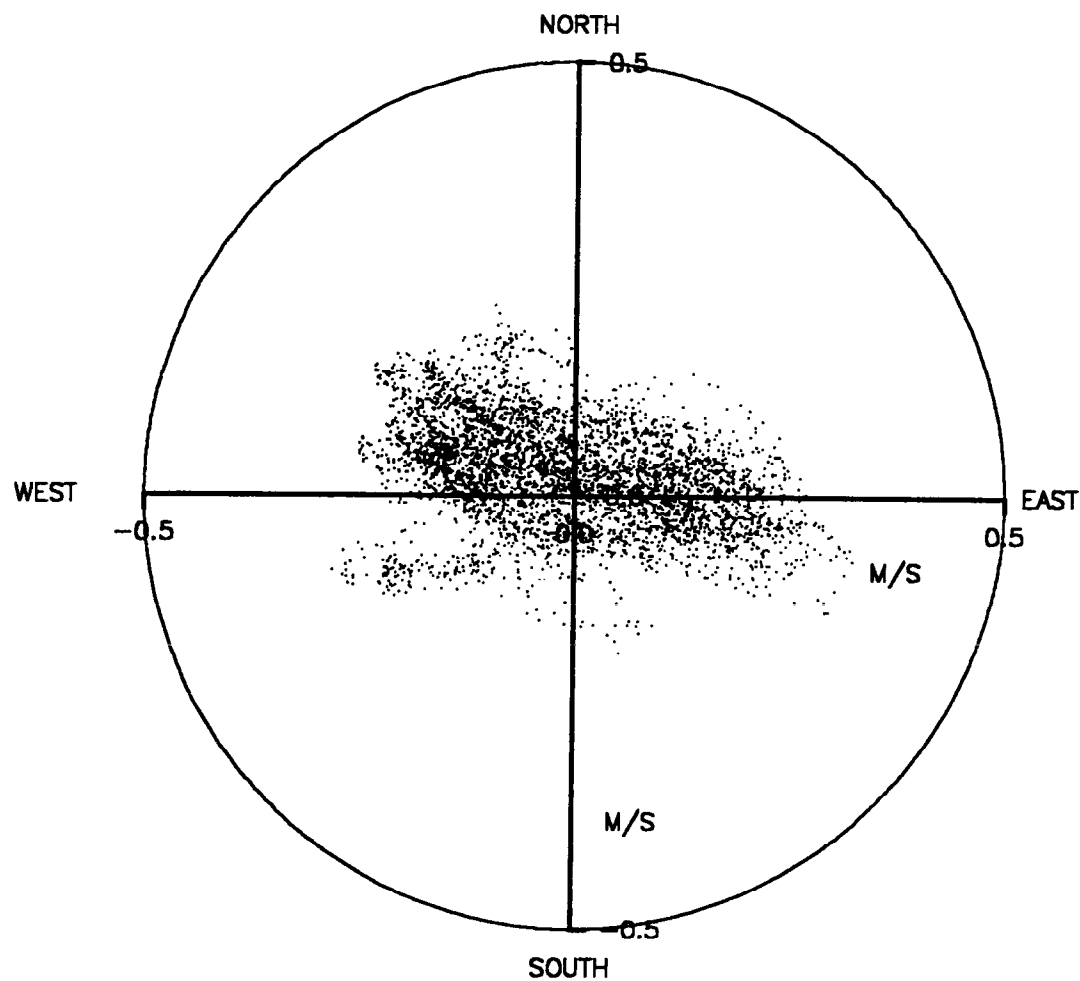
Start/End 1989/06/30 AT 13:01:00 1989/07/30 AT 17:04:00

Position 55 30.13N 05 30.31E Meter Height(m) 37.0



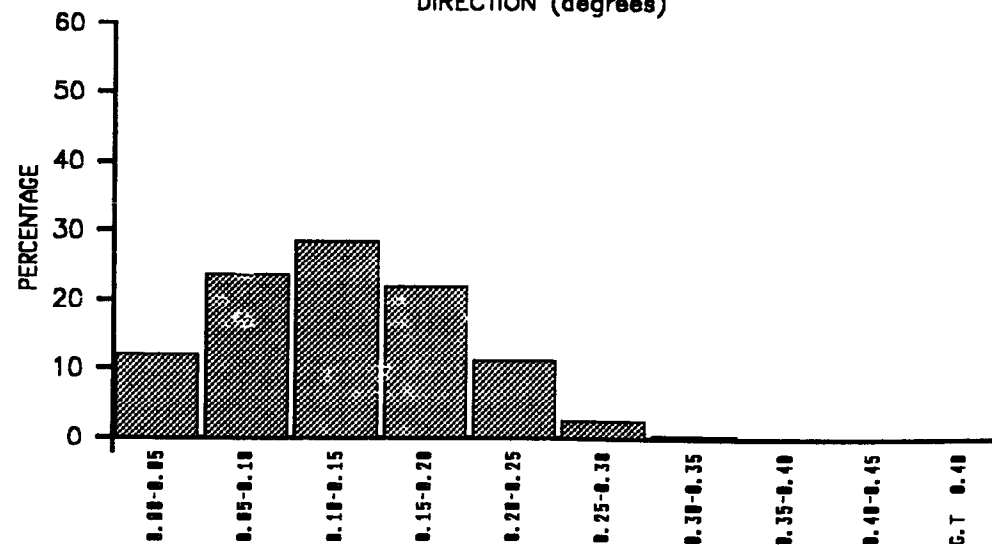
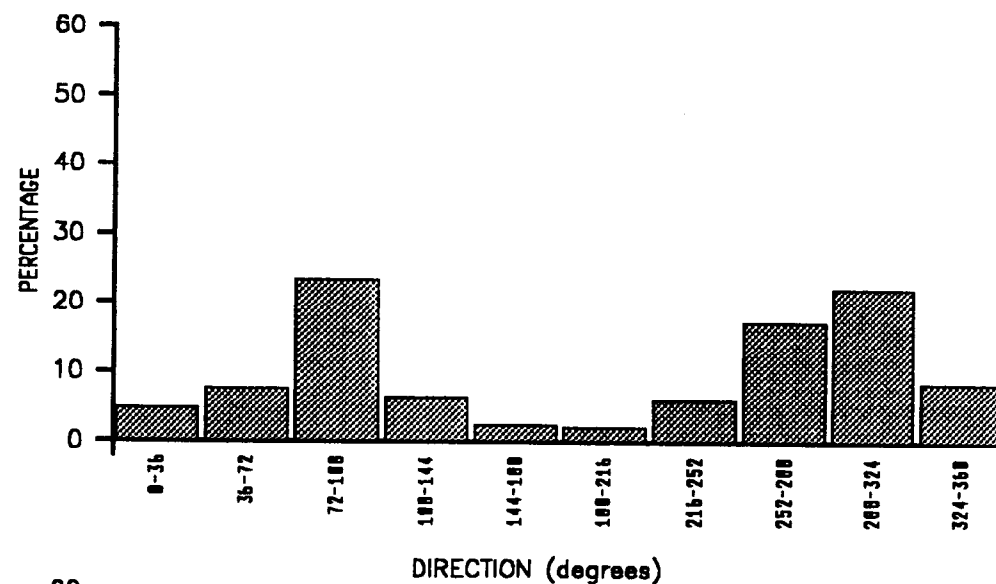
SCATTER PLOT

Meter no. 1264 Rig no. C55BC Depth of water(m) 52.0
 Start/End 1989/06/30 AT 13:01:00 1989/07/30 AT 17:04:00
 Position 55 30.13N 05 30.31E Meter Height(m) 37.0



HISTOGRAMS FOR SPEEDS AND DIRECTIONS

Meter no. 1264 Rig no. C55BC Depth of water(m) 52.0
 Start/End 1989/06/30 AT 13:01:00 1989/07/30 AT 17:04:00
 Position 55 30.13N 05 30.31E Meter Height(m) 37.0

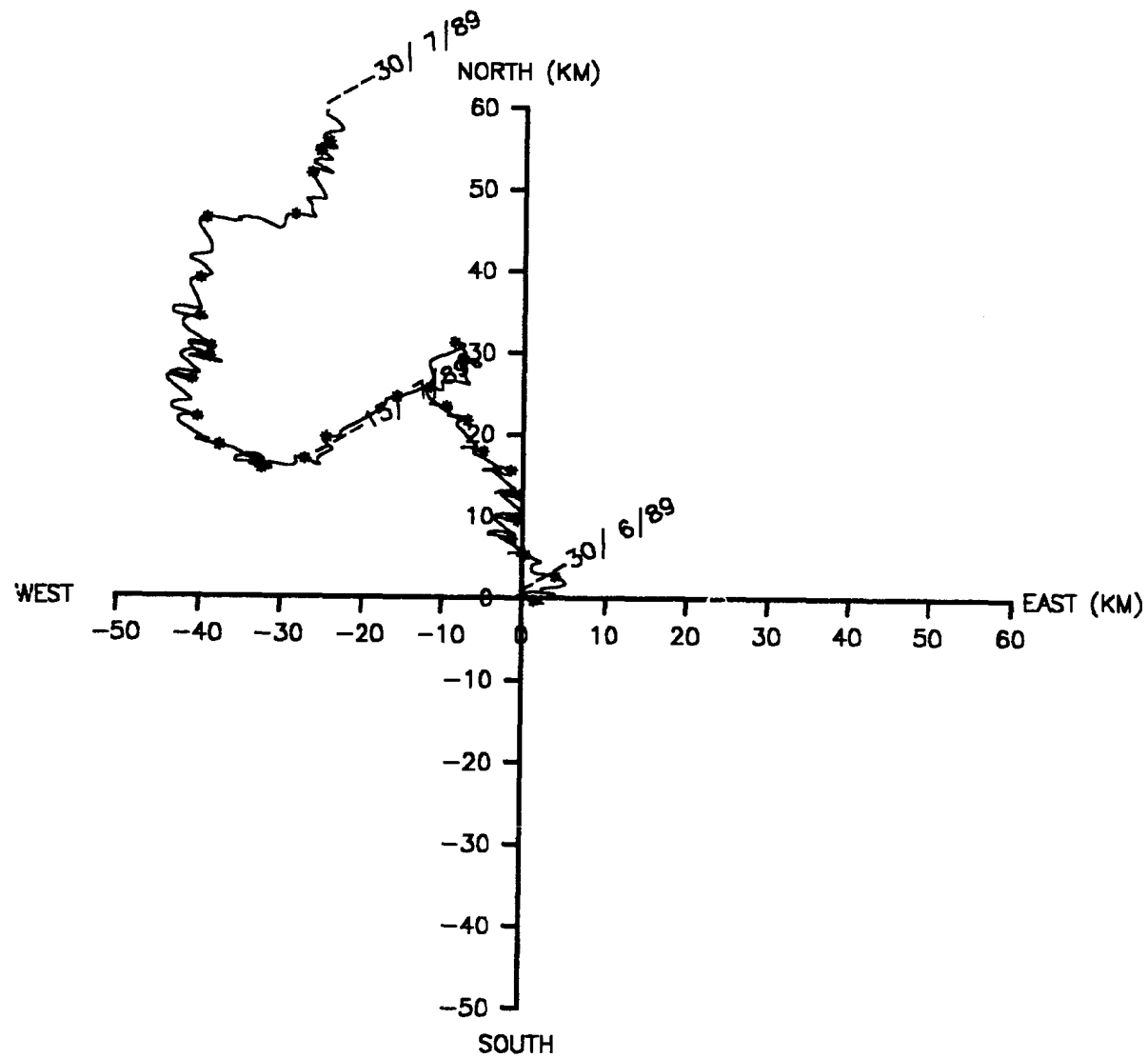


VECTOR PLOT

Meter no. 1264 Rig no. C55BC Depth of water(m) 52.0

Start/End 1989/06/30 AT 13:01:00 1989/07/30 AT 17:04:00

Position 55 30.13N 05 30.31E Meter Height(m) 37.0



STATISTICS FOR S41264T C55BCS A

	Mean	Variance	Standard deviation
Eastings	-0.0095	0.16008712E-01	0.12652552E+00
Northings	0.0228	0.35015899E-02	0.59174232E-01
Speed	0.1272	0.39250664E-02	0.62650323E-01

Vector mean speed 0.0247

Vector Mean Direction -22.6

Maximum ten values

Eastings					Northings				
----------	--	--	--	--	-----------	--	--	--	--

0.324	0.321	0.318	0.315	0.315	0.220	0.210	0.198	0.196	0.194
0.309	0.309	0.306	0.304	0.301	0.191	0.189	0.187	0.185	0.185

Minimum ten values

Eastings					Northings				
----------	--	--	--	--	-----------	--	--	--	--

-0.258	-0.258	-0.260	-0.263	-0.266	-0.149	-0.149	-0.150	-0.150	-0.151
-0.266	-0.266	-0.269	-0.270	-0.282	-0.152	-0.158	-0.160	-0.168	-0.182

Maximum speeds

0.333	0.328	0.327	0.326	0.326	0.323	0.322	0.322	0.317	0.315
0.314	0.313	0.310	0.309	0.304	0.300	0.295	0.295	0.293	0.292
0.288	0.288	0.285	0.285	0.283	0.283	0.282	0.282	0.280	0.280
0.280	0.279	0.278	0.278	0.278	0.277	0.277	0.276	0.276	0.275
0.275	0.273	0.272	0.272	0.271	0.270	0.270	0.270	0.270	0.270
0.270	0.270	0.269	0.268	0.267	0.267	0.266	0.266	0.266	0.266
0.266	0.265	0.265	0.264	0.264	0.264	0.263	0.263	0.263	0.263
0.262	0.262	0.262	0.262	0.261	0.260	0.260	0.259	0.259	0.259
0.259	0.258	0.258	0.258	0.258	0.258	0.258	0.258	0.257	0.256
0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.255	0.255

Variance ellipse statistics

Maximum variance 0.1655E-01

Direction -78.5

Minimum variance 0.2961E-02

Direction 11.5

Total variance 0.1951E-01

Ratio of variances 0.1790E+00

Average direction. maxdir -PI/2 to maxdir +PI/2

23.9

Average direction. maxdir +PI/2 to maxdir -PI/2

167.6

STATISTICS FOR S41264T C55BCSF A

	Mean	Variance	Standard deviation
Eastings	-0.0116	0.21038877E-02	0.45868158E-01
Northings	0.0206	0.12268105E-02	0.35025854E-01
Speed	0.0540	0.94831642E-03	0.30794743E-01

Vector mean speed 0.0236
Vector Mean Direction -29.5

Maximum ten values									
Eastings					Northings				
0.128	0.117	0.115	0.086	0.085	0.089	0.084	0.082	0.071	0.065
0.057	0.053	0.051	0.049	0.043	0.061	0.060	0.058	0.057	0.053

Minimum ten values									
Eastings					Northings				
-0.061	-0.064	-0.070	-0.071	-0.079	-0.028	-0.035	-0.040	-0.048	-0.051
-0.090	-0.102	-0.120	-0.130	-0.137	-0.062	-0.080	-0.083	-0.096	-0.099

Maximum speeds									
0.167	0.156	0.153	0.128	0.122	0.119	0.118	0.116	0.094	0.089
0.089	0.086	0.083	0.081	0.080	0.080	0.077	0.072	0.072	0.070
0.070	0.066	0.066	0.065	0.063	0.062	0.062	0.062	0.061	0.060
0.059	0.059	0.057	0.055	0.054	0.053	0.052	0.052	0.052	0.051
0.051	0.049	0.049	0.049	0.048	0.048	0.046	0.045	0.045	0.045
0.045	0.044	0.042	0.042	0.041	0.040	0.040	0.040	0.040	0.039
0.038	0.038	0.038	0.038	0.037	0.036	0.036	0.036	0.035	0.035
0.035	0.035	0.034	0.034	0.033	0.033	0.033	0.032	0.032	0.032
0.032	0.032	0.032	0.031	0.031	0.031	0.030	0.027	0.027	0.026
0.026	0.021	0.019	0.015	0.013	0.012	0.011			

Variance ellipse statistics

Maximum variance 0.2657E-02	Direction	58.1
Minimum variance 0.6733E-03	Direction	148.1
Total variance 0.3331E-02	Ratio of variances	0.2534E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		-43.8
Average direction. maxdir +PI/2 to maxdir -PI/2		222.9

Meter information details for 1119

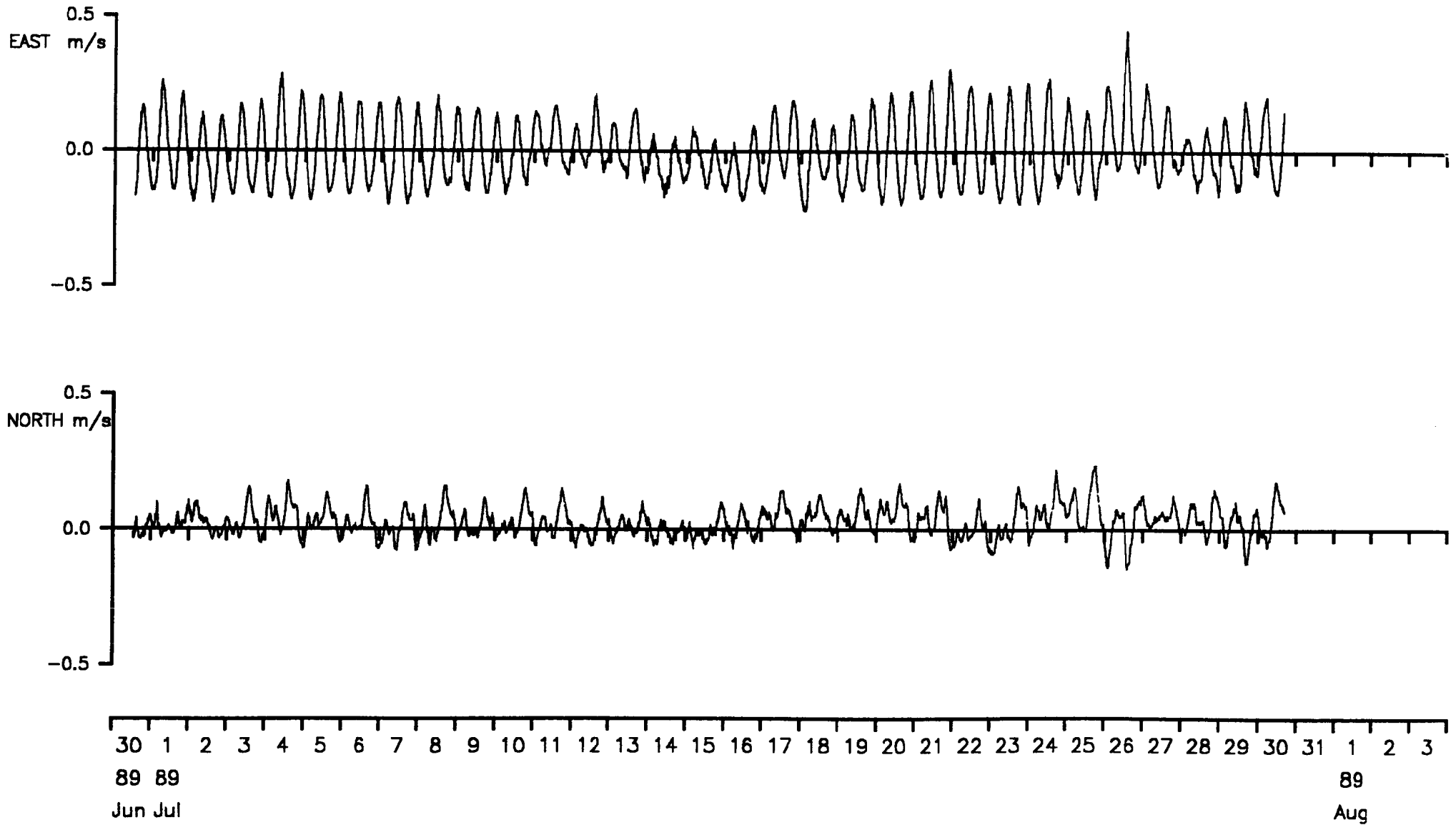
Rig No	:	C55BC
Meter No	:	1119
Recording interval	:	600.0 seconds
Meter height from bottom	:	27.0 m
Position of meter on rig	:	MT
Meter type	:	S4
Meter started	:	28-JUNE-89 20:50:00
Time of last valid scan	:	30-JULY-89 16:40:00
Period of good data	:	30.2 days short record
Total number of scans	:	4342
Timing error	:	None
Comments	:	Good record obtained

VELOCITY COMPONENT TIME SERIES PLOT

Meter no. 1119 Rig no. C55BC Depth of water(m) 52.0

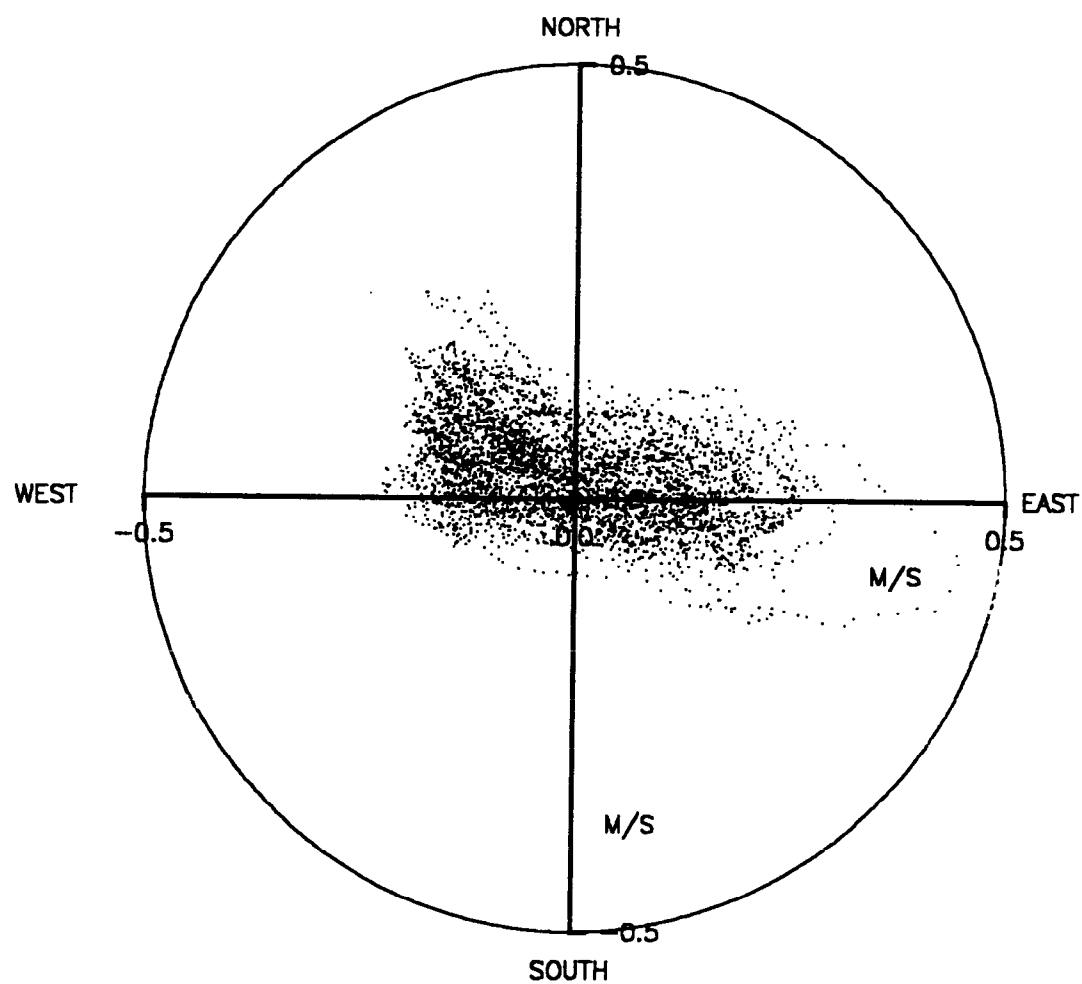
Start/End 1989/06/30 AT 13:01:00 1989/07/30 AT 17:04:00

Position 55 30.13N 05 30.31E Meter Height(m) 27.0



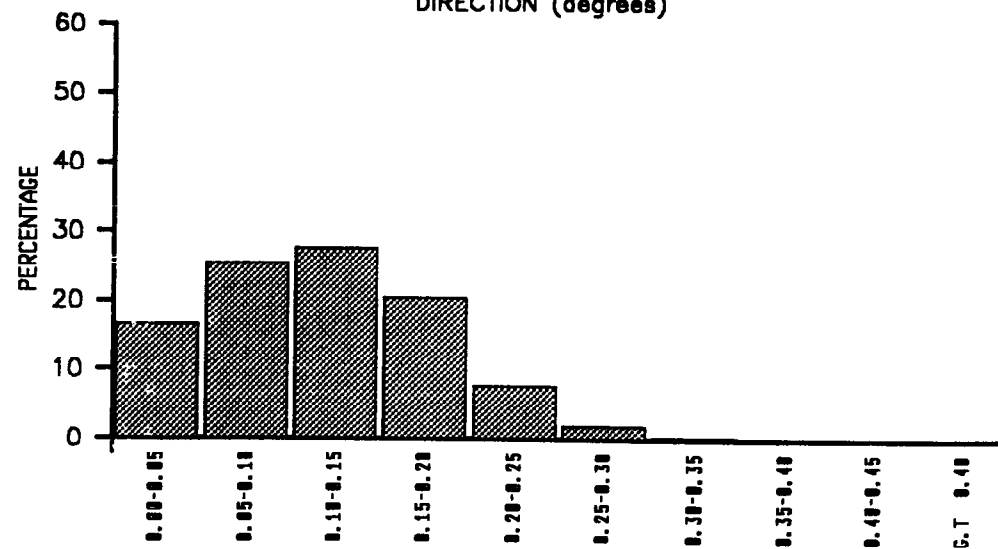
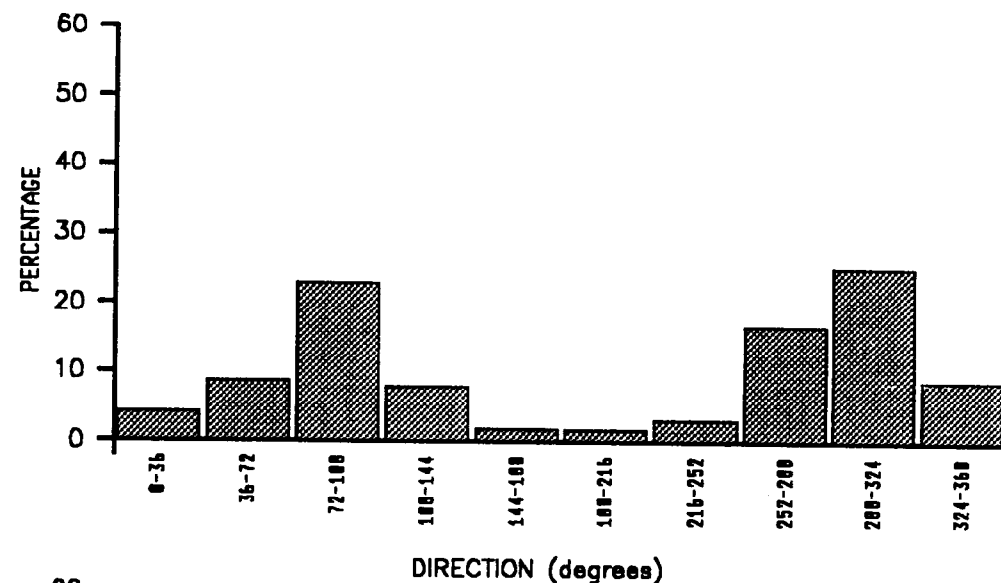
SCATTER PLOT

Meter no. 1119 Rig no. C55BC Depth of water(m) 52.0
 Start/End 1989/06/30 AT 13:01:00 1989/07/30 AT 17:04:00
 Position 55 30.13N 05 30.31E Meter Height(m) 27.0



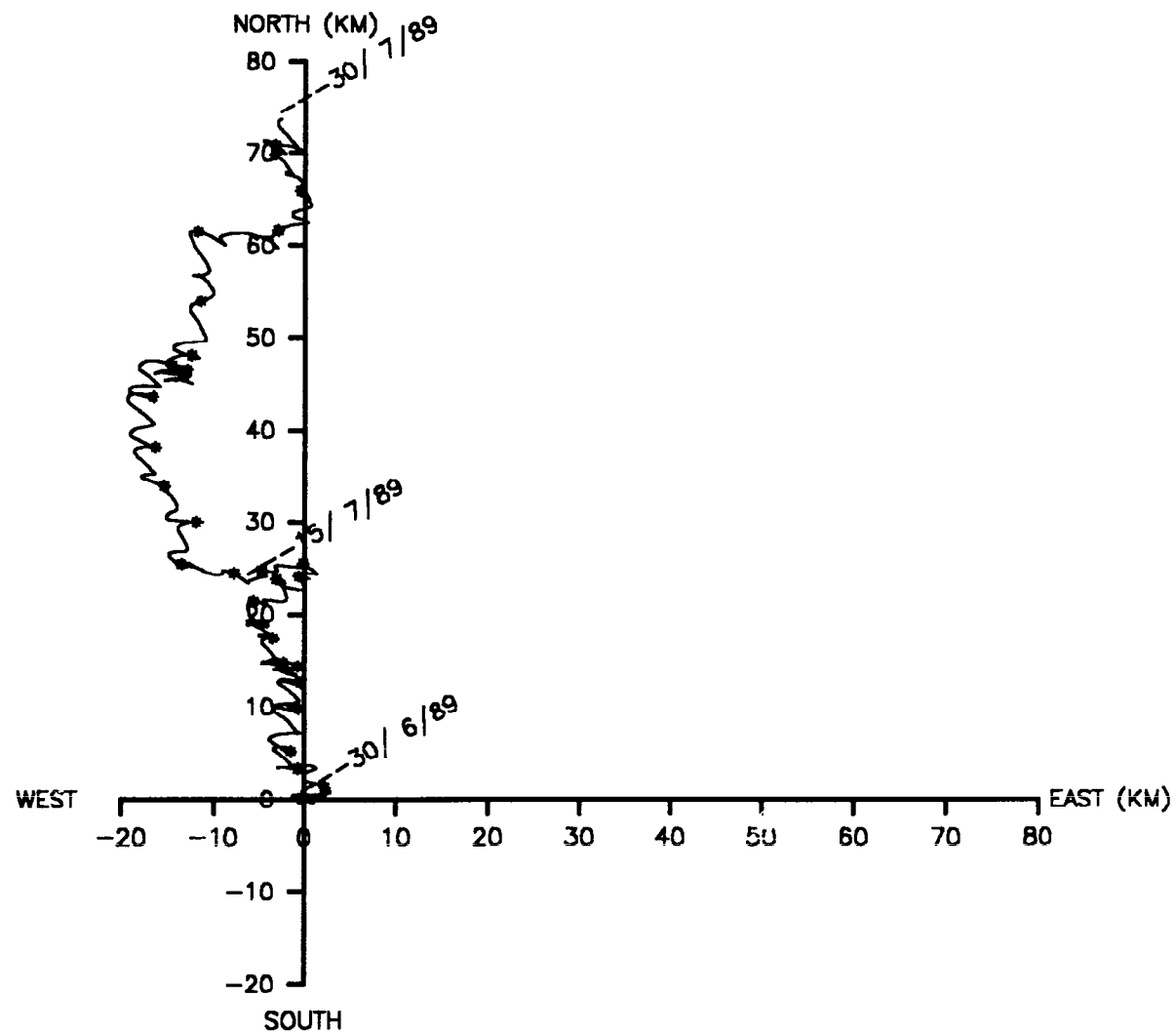
HISTOGRAMS FOR SPEEDS AND DIRECTIONS

Meter no. 1119 Rig no. C55BC Depth of water(m) 52.0
 Start/End 1989/06/30 AT 13:01:00 1989/07/30 AT 17:04:00
 Position 55 30.13N 05 30.31E Meter Height(m) 27.0



VECTOR PLOT

Meter no. 1119 Rig no. C55BC Depth of water(m) 52.0
Start/End 1989/06/30 AT 13:01:00 1989/07/30 AT 17:04:00
Position 55 30.13N 05 30.31E Meter Height(m) 27.0



STATISTICS FOR S41119MT C55BCS A

	Mean	Variance	Standard deviation
Eastings	-0.0010	0.13907854E-01	0.11793154E+00
Northings	0.0283	0.31150405E-02	0.55812549E-01
Speed	0.1171	0.41152872E-02	0.64150512E-01

Vector mean speed 0.0283
 Vector Mean Direction -1.9

Maximum ten values

Eastings

Northings

0.448	0.446	0.438	0.421	0.420	0.237	0.236	0.236	0.232	0.230
0.400	0.393	0.379	0.375	0.362	0.229	0.227	0.223	0.223	0.222

Minimum ten values

Eastings

Northings

-0.209	-0.215	-0.217	-0.218	-0.219	-0.133	-0.133	-0.134	-0.135	-0.136
-0.219	-0.220	-0.221	-0.223	-0.223	-0.137	-0.140	-0.142	-0.142	-0.145

Maximum speeds

0.454	0.450	0.449	0.439	0.422	0.419	0.400	0.393	0.380	0.375
0.362	0.356	0.354	0.349	0.340	0.335	0.324	0.320	0.305	0.304
0.301	0.301	0.300	0.297	0.295	0.294	0.293	0.293	0.290	0.288
0.284	0.282	0.280	0.280	0.279	0.279	0.278	0.278	0.277	0.273
0.272	0.272	0.272	0.272	0.271	0.270	0.269	0.268	0.268	0.268
0.268	0.267	0.265	0.265	0.265	0.265	0.265	0.265	0.264	0.264
0.263	0.262	0.262	0.262	0.262	0.260	0.260	0.259	0.259	0.259
0.258	0.258	0.258	0.258	0.258	0.258	0.256	0.256	0.256	0.255
0.254	0.254	0.254	0.253	0.253	0.252	0.252	0.252	0.252	0.252
0.252	0.252	0.252	0.252	0.252	0.251	0.251	0.251	0.251	0.250

Variance ellipse statistics

Maximum variance 0.1465E-01

Direction -75.8

Minimum variance 0.2372E-02

Direction 14.2

Total variance 0.1702E-01

Ratio of variances 0.1619E+00

Average direction. maxdir -PI/2 to maxdir +PI/2

24.5

Average direction. maxdir +PI/2 to maxdir -PI/2

165.5

STATISTICS FOR S41119MT C55BCSF A

	Mean	Variance	Standard deviation
Eastings	0.0011	0.11700820E-02	0.34206465E-01
Northings	0.0288	0.62343734E-03	0.24968728E-01
Speed	0.0454	0.55168616E-03	0.23488004E-01

Vector mean speed 0.0288
Vector Mean Direction 2.2

Maximum ten values									
Eastings					Northings				
0.117	0.109	0.100	0.081	0.064	0.098	0.096	0.091	0.081	0.079
0.045	0.038	0.036	0.036	0.033	0.065	0.064	0.062	0.061	0.056

Minimum ten values									
Eastings					Northings				
-0.042	-0.042	-0.045	-0.048	-0.050	-0.001	-0.002	-0.005	-0.010	-0.011
-0.053	-0.058	-0.074	-0.077	-0.085	-0.013	-0.015	-0.016	-0.018	-0.020

Maximum speeds									
0.117	0.110	0.101	0.098	0.097	0.092	0.088	0.087	0.083	0.081
0.078	0.077	0.071	0.069	0.068	0.064	0.062	0.062	0.061	0.061
0.059	0.058	0.057	0.057	0.057	0.056	0.056	0.055	0.054	0.054
0.053	0.053	0.052	0.051	0.051	0.051	0.050	0.050	0.049	0.048
0.048	0.048	0.047	0.046	0.045	0.044	0.044	0.044	0.043	0.041
0.040	0.040	0.039	0.039	0.038	0.036	0.036	0.035	0.034	0.034
0.034	0.033	0.033	0.033	0.032	0.031	0.030	0.030	0.029	0.029
0.028	0.028	0.028	0.028	0.028	0.027	0.026	0.025	0.025	0.025
0.025	0.025	0.023	0.022	0.022	0.022	0.020	0.020	0.019	0.019
0.017	0.015	0.013	0.013	0.013	0.010	0.002			

Variance ellipse statistics

Maximum variance 0.1162E-02	Direction	81.6
Minimum variance 0.6112E-03	Direction	171.6
Total variance 0.1794E-02	Ratio of variances	0.5169E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		-48.9
Average direction. maxdir +PI/2 to maxdir -PI/2		218.6

Meter information details for 1113

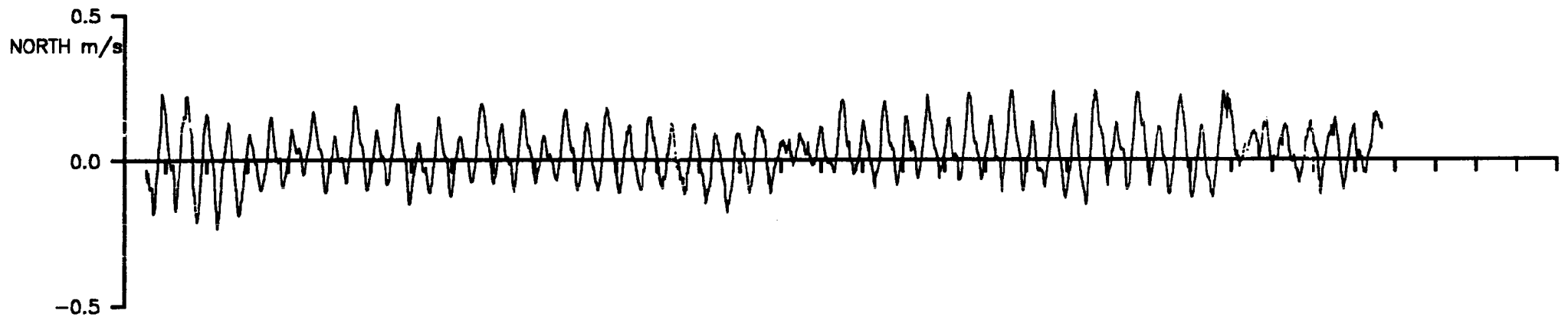
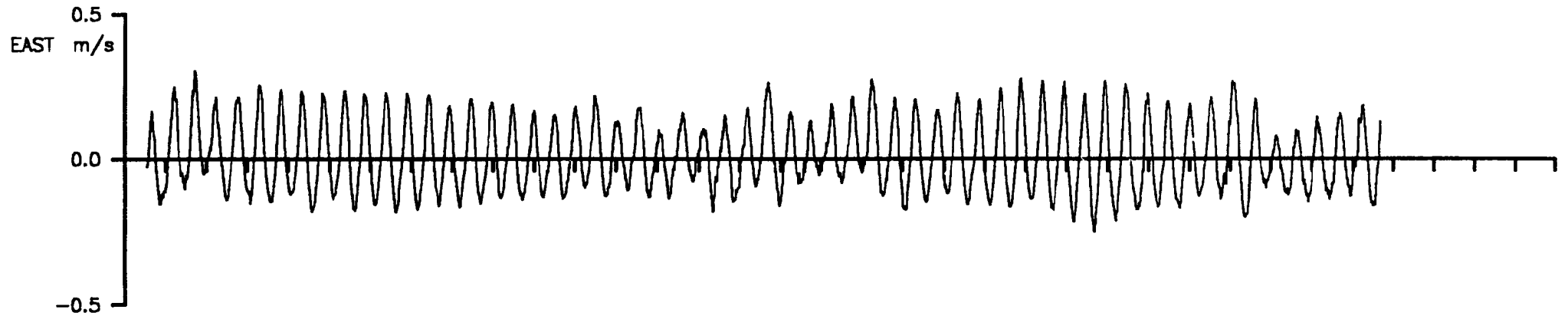
Rig No	:	C55BC
Meter No	:	1113
Recording interval	:	600.0 seconds
Meter height from bottom	:	15.0 m
Position of meter on rig	:	MB
Meter type	:	S4
Meter started	:	30-JUNE-89 12:30:00
Time of last valid scan	:	30-JULY-89 16:20:00
Period of good data	:	30.1 days short record
Total number of scans	:	4340
Timing error	:	None
Comments	:	Good record obtained

VELOCITY COMPONENT TIME SERIES PLOT

Meter no. 1113 Rig no. C55BC Depth of water(m) 52.0

Start/End 1989/06/30 AT 13:01:00 1989/07/30 AT 17:04:00

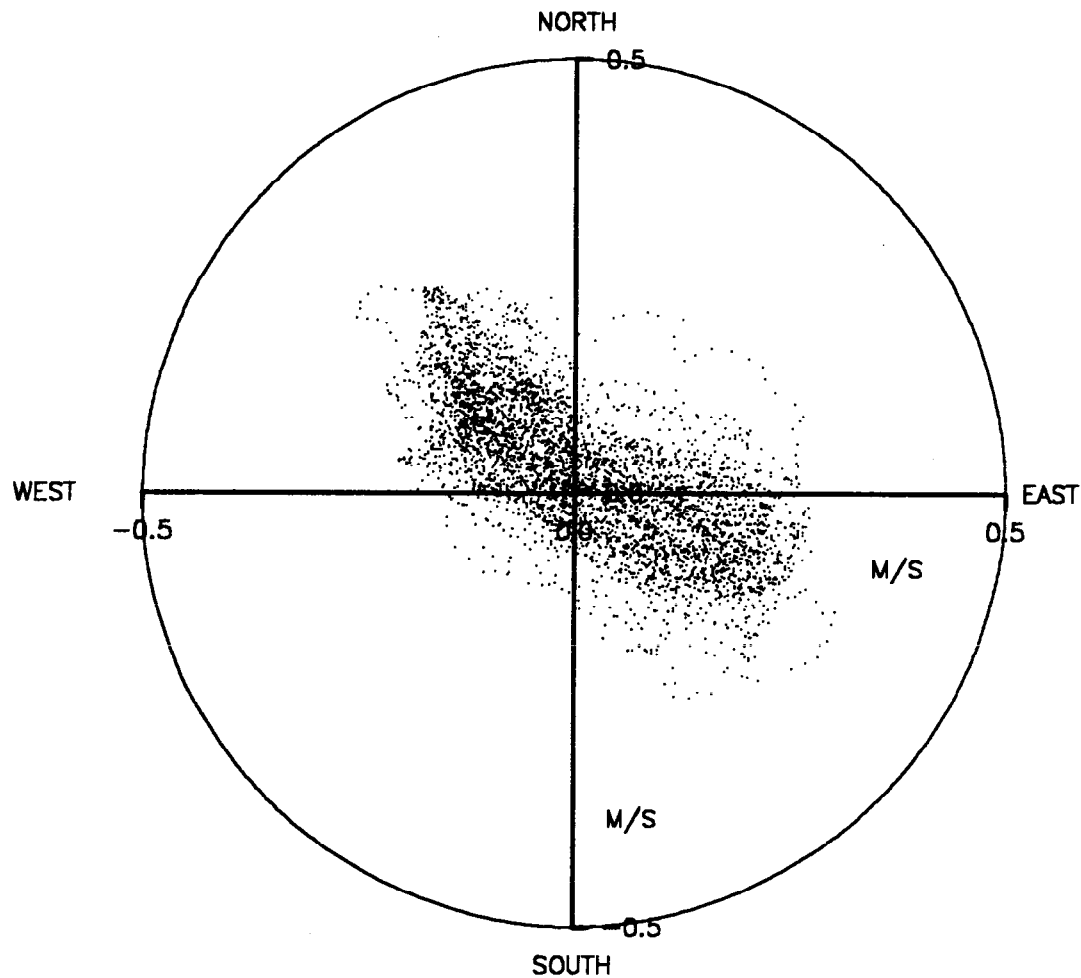
Position 55 30.13N 05 30.31E Meter Height(m) 15.0



30 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3
89 89
Jun Jul Aug

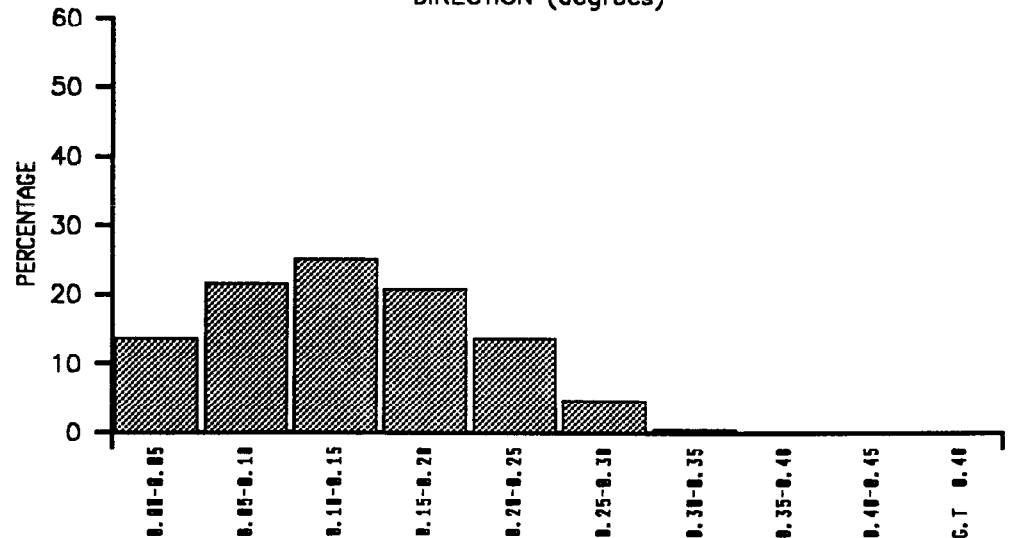
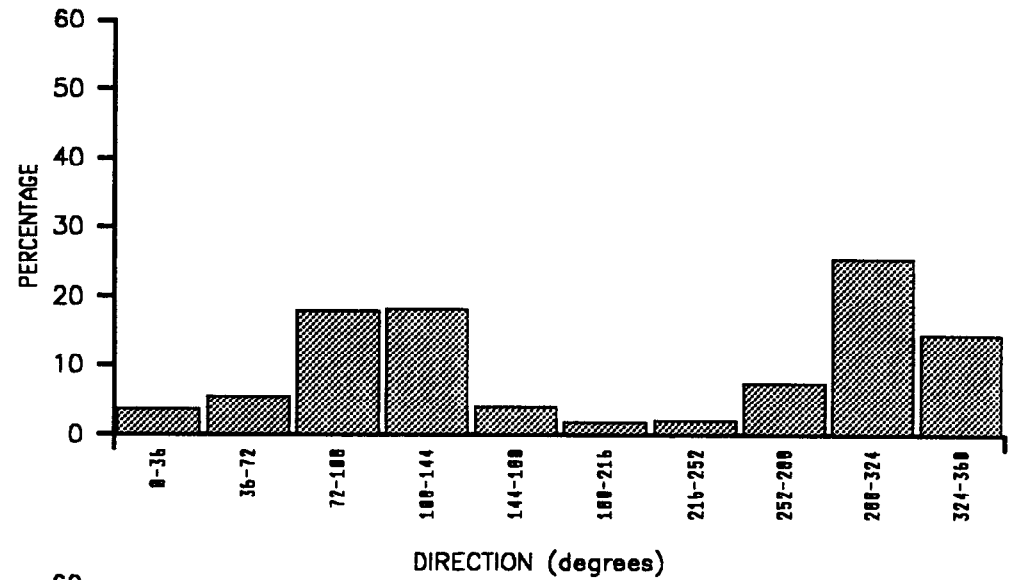
SCATTER PLOT

Meter no. 1113 Rig no. C55BC Depth of water(m) 52.0
 Start/End 1989/06/30 AT 13:01:00 1989/07/30 AT 17:04:00
 Position 55 30.13N 05 30.31E Meter Height(m) 15.0



HISTOGRAMS FOR SPEEDS AND DIRECTIONS

Meter no. 1113 Rig no. C55BC Depth of water(m) 52.0
 Start/End 1989/06/30 AT 13:01:00 1989/07/30 AT 17:04:00
 Position 55 30.13N 05 30.31E Meter Height(m) 15.0

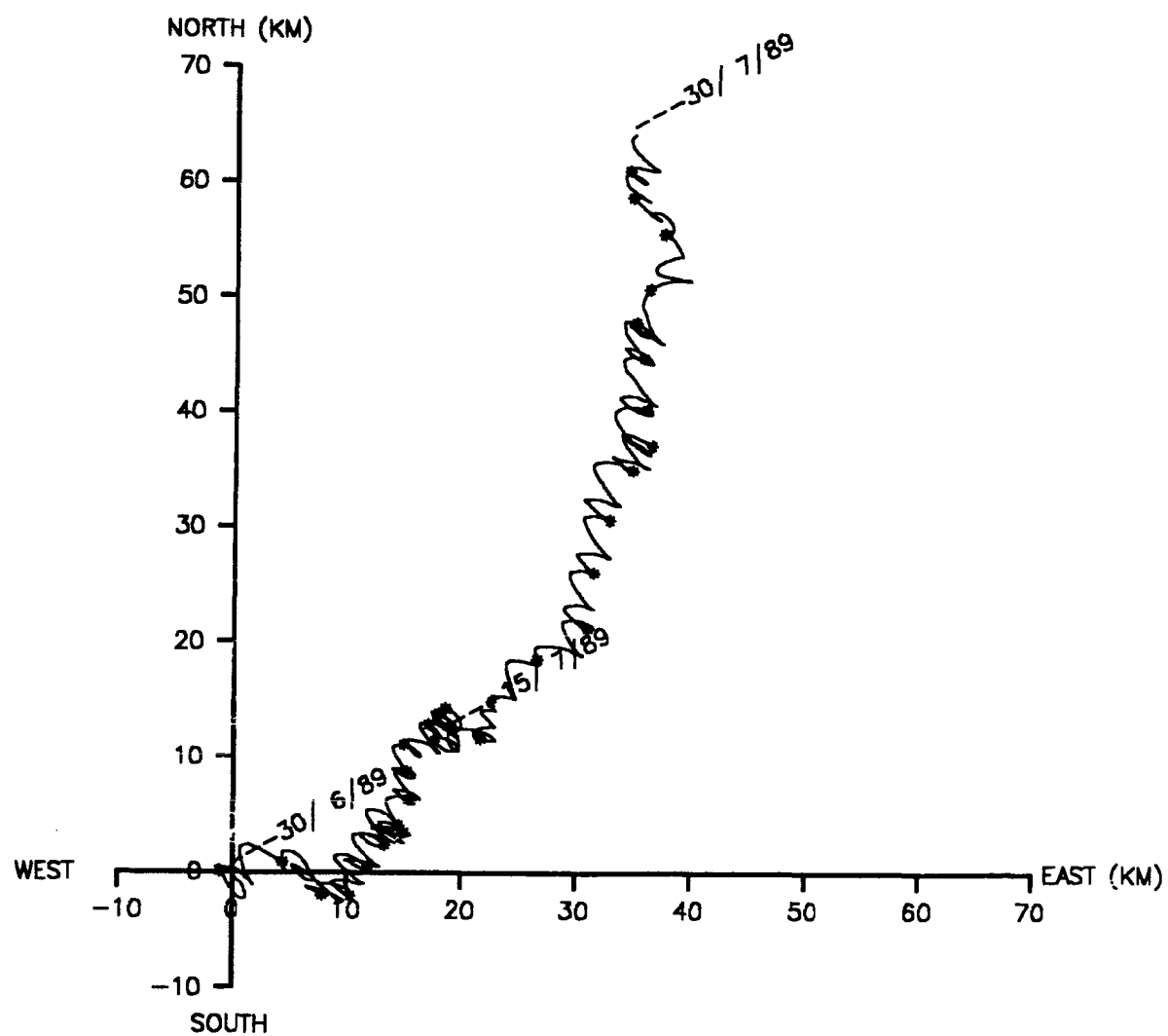


VECTOR PLOT

Meter no. 1113 Rig no. C55BC Depth of water(m) 52.0

Start/End 1989/06/30 AT 13:01:00 1989/07/30 AT 17:04:00

Position 55 30.13N 05 30.31E Meter Height(m) 15.0



STATISTICS FOR S41113MB C55BCS A

	Mean	Variance	Standard deviation
Eastings	0.0134	0.14160298E-01	0.11899704E+00
Northings	0.0246	0.72761998E-02	0.85300624E-01
Speed	0.1322	0.47426336E-02	0.68866730E-01

Vector mean speed 0.0280
Vector Mean Direction 28.6

Maximum ten values									
Eastings					Northings				
0.303	0.300	0.295	0.289	0.287	0.237	0.237	0.237	0.236	0.236
0.284	0.282	0.276	0.274	0.273	0.235	0.234	0.234	0.234	0.234

Minimum ten values									
Eastings					Northings				
-0.218	-0.218	-0.220	-0.226	-0.230	-0.206	-0.211	-0.212	-0.216	-0.218
-0.241	-0.242	-0.251	-0.251	-0.254	-0.219	-0.229	-0.230	-0.235	-0.236

Maximum speeds									
0.340	0.340	0.336	0.336	0.334	0.333	0.333	0.332	0.328	0.328
0.325	0.325	0.320	0.314	0.314	0.309	0.304	0.304	0.300	0.294
0.294	0.294	0.292	0.292	0.292	0.288	0.288	0.287	0.287	0.287
0.287	0.286	0.286	0.286	0.286	0.285	0.284	0.284	0.283	0.283
0.283	0.283	0.283	0.283	0.283	0.282	0.281	0.281	0.281	0.280
0.280	0.280	0.280	0.279	0.278	0.278	0.277	0.277	0.277	0.277
0.276	0.276	0.276	0.276	0.275	0.275	0.275	0.275	0.275	0.274
0.274	0.273	0.272	0.272	0.272	0.272	0.271	0.271	0.271	0.271
0.271	0.271	0.270	0.270	0.270	0.270	0.270	0.270	0.270	0.270
0.270	0.269	0.269	0.269	0.269	0.269	0.269	0.269	0.269	0.269

Variance ellipse statistics

Maximum variance 0.1868E-01	Direction	-57.8
Minimum variance 0.2756E-02	Direction	32.2
Total variance 0.2144E-01	Ratio of variances	0.1475E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		16.4
Average direction. maxdir +PI/2 to maxdir -PI/2		166.0

STATISTICS FOR S41113MB C55BCSF A

	Mean	Variance	Standard deviation
Eastings	0.0144	0.22803487E-03	0.15100822E-01
Northings	0.0265	0.45275711E-03	0.21278095E-01
Speed	0.0357	0.31768857E-03	0.17823827E-01

Vector mean speed 0.0302
Vector Mean Direction 28.4

Maximum ten values									
Eastings					Northings				
0.066	0.063	0.058	0.051	0.044	0.077	0.072	0.071	0.055	0.055
0.041	0.040	0.036	0.035	0.033	0.054	0.054	0.054	0.053	0.053

Minimum ten values									
Eastings					Northings				
-0.004	-0.004	-0.005	-0.005	-0.005	-0.003	-0.004	-0.006	-0.012	-0.013
-0.006	-0.006	-0.006	-0.007	-0.010	-0.013	-0.015	-0.024	-0.024	-0.028

Maximum speeds									
0.080	0.078	0.077	0.077	0.072	0.070	0.067	0.065	0.059	0.056
0.056	0.055	0.054	0.054	0.054	0.054	0.054	0.054	0.053	0.053
0.053	0.053	0.052	0.051	0.049	0.048	0.048	0.047	0.046	0.045
0.045	0.045	0.043	0.041	0.040	0.040	0.039	0.039	0.038	0.037
0.036	0.035	0.035	0.033	0.033	0.033	0.032	0.032	0.031	0.031
0.030	0.030	0.030	0.030	0.029	0.029	0.029	0.029	0.028	0.028
0.027	0.027	0.027	0.026	0.026	0.026	0.025	0.025	0.025	0.024
0.024	0.024	0.023	0.023	0.022	0.022	0.022	0.020	0.020	0.019
0.017	0.016	0.016	0.015	0.015	0.014	0.014	0.014	0.014	0.013
0.011	0.011	0.011	0.010	0.010	0.009	0.008			

Variance ellipse statistics

Maximum variance 0.4735E-03	Direction	16.2
Minimum variance 0.2073E-03	Direction	106.2
Total variance 0.6808E-03	Ratio of variances	0.4379E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		10.3
Average direction. maxdir +PI/2 to maxdir -PI/2		136.0

Meter information details for 9419

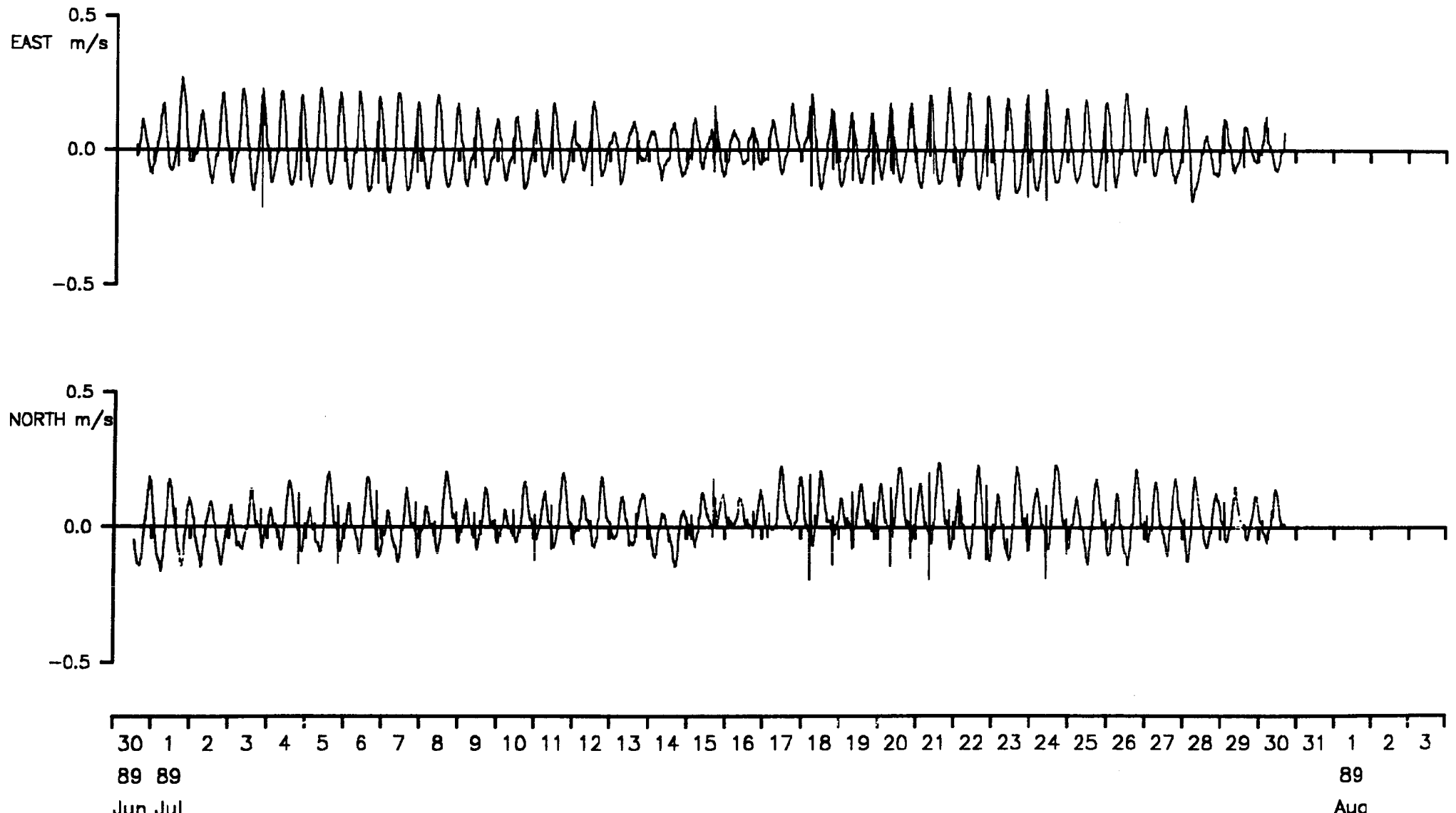
Rig No	:	C55BC
Meter No	:	9419
Recording interval	:	600.0 seconds
Meter height from bottom	:	7.0 m
Position of meter on rig	:	B
Meter type	:	AS
Meter started	:	28-JUNE-89 20:00:00
Meter stopped	:	01-AUG-89 08:20:00
Period switched on	:	33.5 days
Period of good data	:	30.2 days
Total number of scans	:	4344
Timing error	:	None
Comments	:	Spikes present in East and North components of velocity
		Pressure sensor indicates some instability on 14-JULY-89

VELOCITY COMPONENT TIME SERIES PLOT

Meter no. 9419 Rig no. C55BC Depth of water(m) 52.0

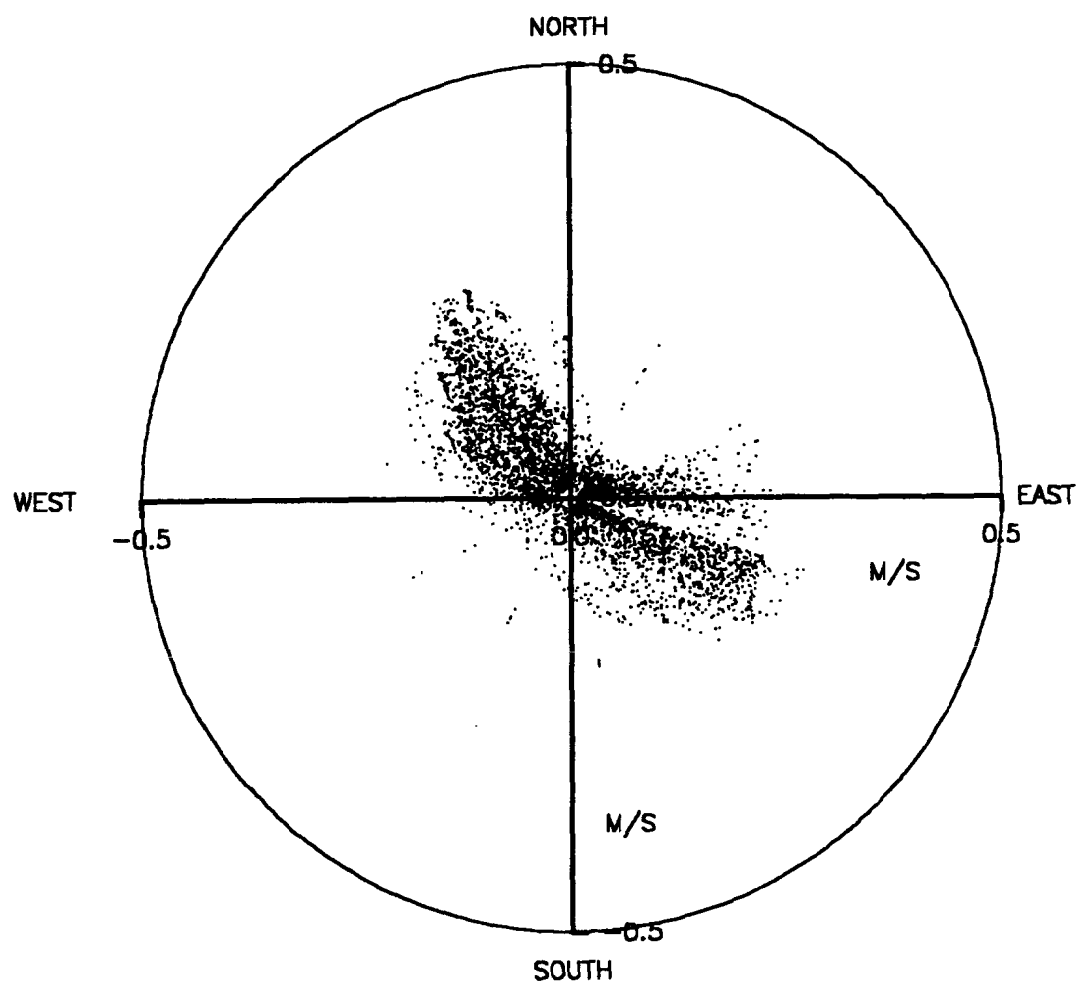
Start/End 1989/06/30 AT 13:01:00 1989/07/30 AT 17:04:00

Position 55 30.13N 05 30.31E Meter Height(m) 7.0



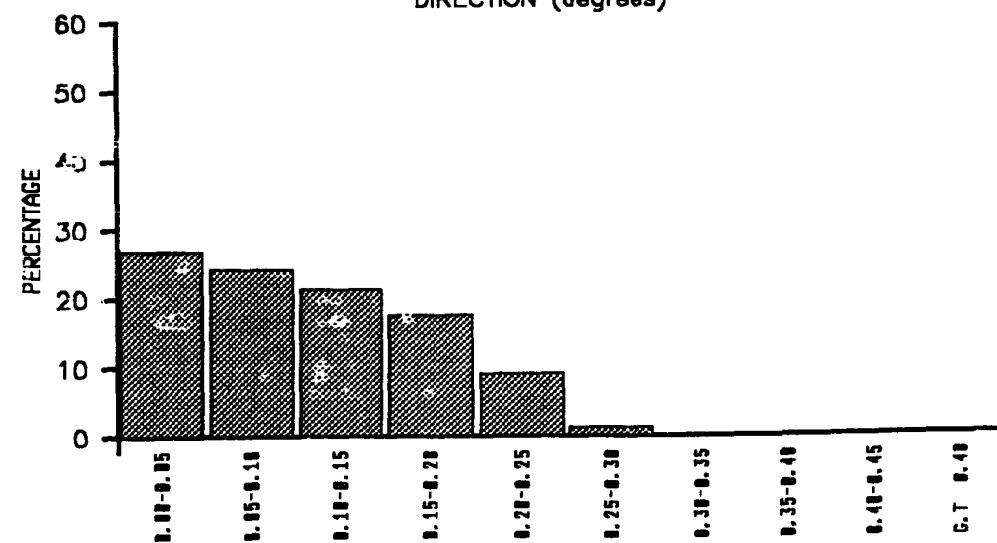
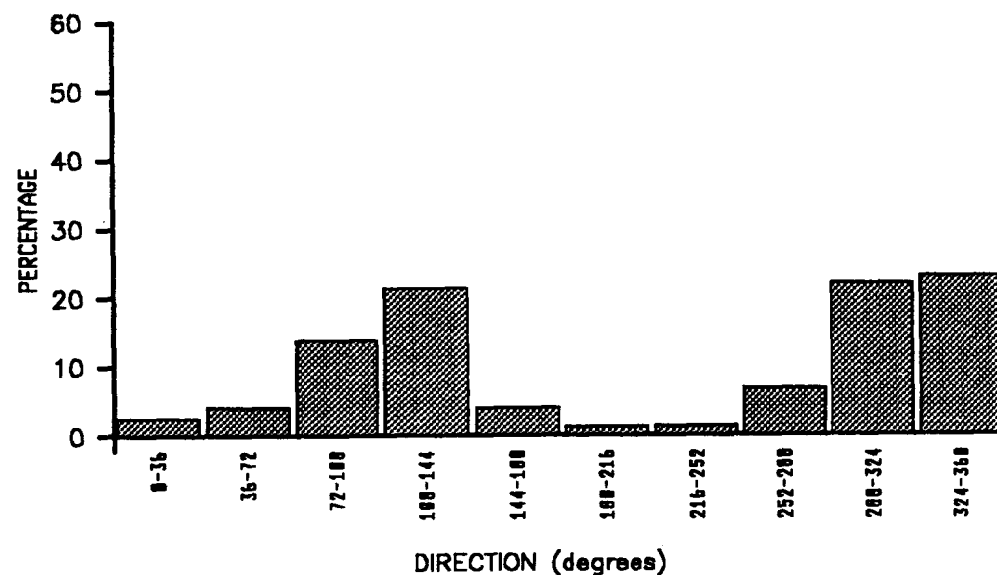
SCATTER PLOT

Meter no. 9419 Rig no. C55BC Depth of water(m) 52.0
 Start/End 1989/06/30 AT 13:01:00 1989/07/30 AT 17:04:00
 Position 55 30.13N 05 30.31E Meter Height(m) 7.0



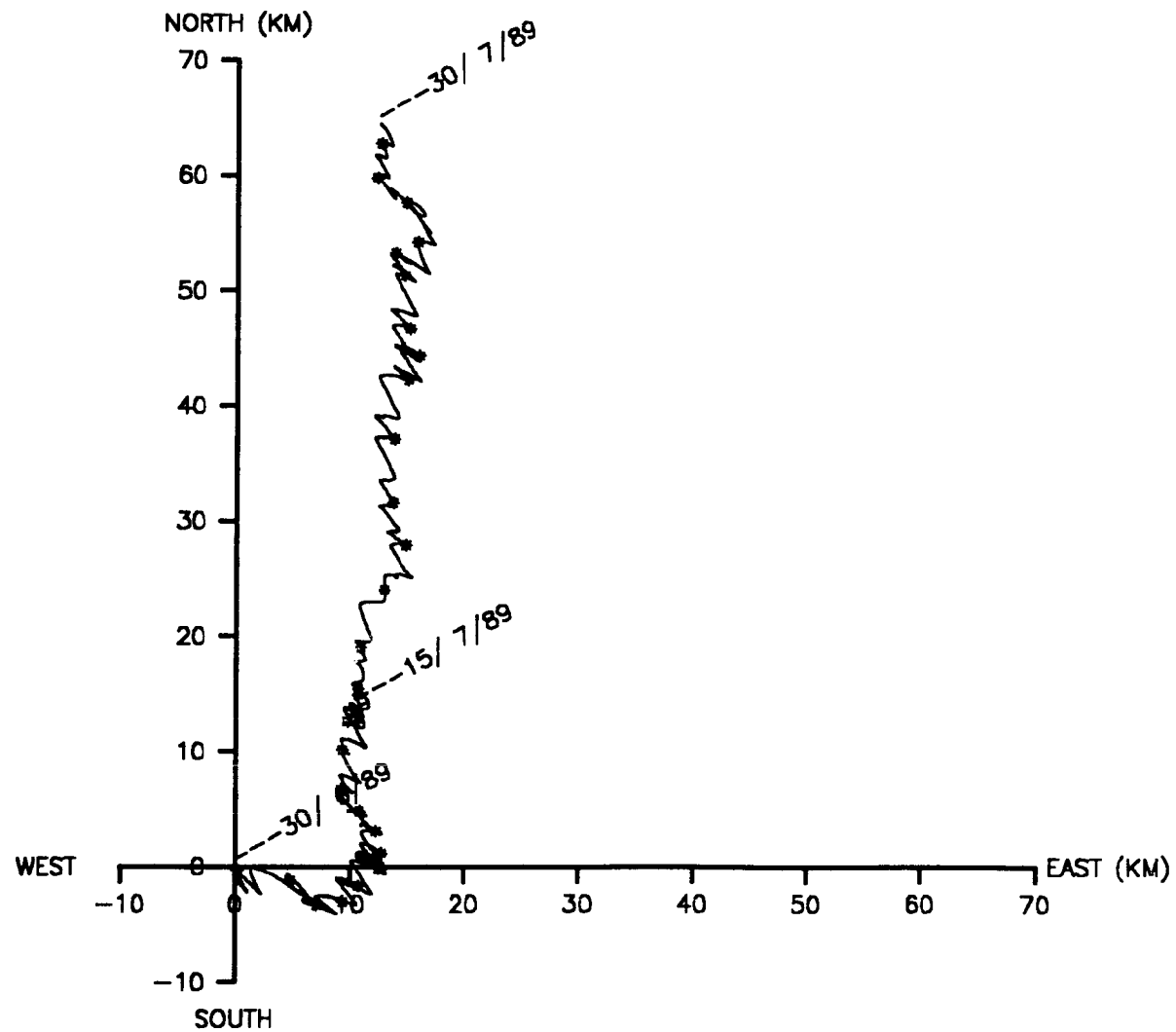
HISTOGRAMS FOR SPEEDS AND DIRECTIONS

Meter no. 9419 Rig no. C55BC Depth of water(m) 52.0
 Start/End 1989/06/30 AT 13:01:00 1989/07/30 AT 17:04:00
 Position 55 30.13N 05 30.31E Meter Height(m) 7.0



VECTOR PLOT

Meter no. 9419 Rig no. C55BC Depth of water(m) 52.0
Start/End 1989/06/30 AT 13:01:00 1989/07/30 AT 17:04:00
Position 55 30.13N 05 30.31E Meter Height(m) 7.0

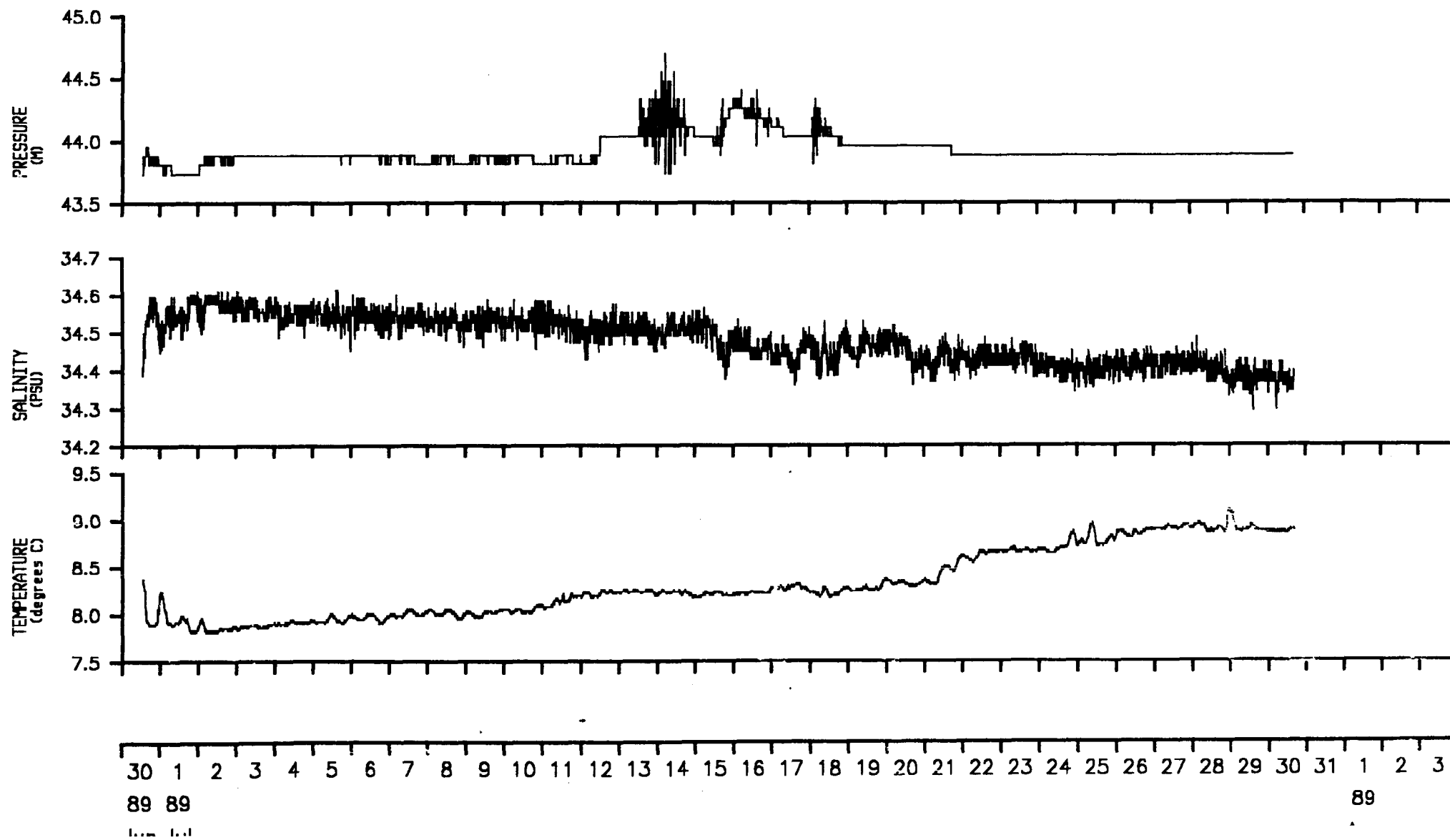


TEMPERATURE,SALINITY AND PRESSURE TIME SERIES PLOTS

Meter no. 9419 Rig no. C55BC Depth of water(m) 52.0

Start/End 1989/06/30 AT 13:01:00 1989/07/30 AT 17:04:00

Position 55 30.13N 05 30.31E Meter Height(m) 7.0



STATISTICS FOR AS9419B C55BCS A

	Mean	Variance	Standard deviation
Eastings	0.0048	0.86770058E-02	0.93150437E-01
Northings	0.0247	0.60983077E-02	0.78091621E-01
Speed	0.1051	0.43694302E-02	0.66101611E-01

Vector mean speed 0.0252
 Vector Mean Direction 11.0

Maximum ten values									
Eastings					Northings				
0.268	0.262	0.262	0.250	0.248	0.240	0.239	0.239	0.237	0.237
0.241	0.237	0.235	0.232	0.231	0.235	0.234	0.232	0.230	0.230

Minimum ten values									
Eastings					Northings				
-0.179	-0.181	-0.182	-0.182	-0.182	-0.147	-0.149	-0.151	-0.152	-0.153
-0.185	-0.188	-0.188	-0.191	-0.214	-0.156	-0.165	-0.189	-0.191	-0.194

Maximum speeds									
0.281	0.276	0.275	0.275	0.273	0.270	0.270	0.270	0.270	0.270
0.270	0.267	0.267	0.267	0.267	0.267	0.264	0.264	0.264	0.264
0.264	0.261	0.261	0.261	0.261	0.261	0.261	0.258	0.258	0.258
0.258	0.258	0.255	0.255	0.255	0.255	0.255	0.255	0.255	0.255
0.255	0.255	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.249
0.249	0.249	0.249	0.249	0.246	0.246	0.246	0.246	0.246	0.246
0.246	0.246	0.246	0.246	0.246	0.246	0.246	0.243	0.243	0.243
0.243	0.243	0.243	0.243	0.243	0.243	0.243	0.243	0.243	0.243
0.243	0.243	0.243	0.243	0.241	0.241	0.241	0.241	0.241	0.241
0.241	0.241	0.241	0.241	0.241	0.241	0.241	0.241	0.241	0.238

Variance ellipse statistics

Maximum variance 0.1316E-01	Direction	-51.5
Minimum variance 0.1618E-02	Direction	38.5
Total variance 0.1477E-01	Ratio of variances	0.1230E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		14.2
Average direction. maxdir +PI/2 to maxdir -PI/2		162.5

STATISTICS FOR AS9419B C55BCSF A

	Mean	Variance	Standard deviation
Eastings	0.0043	0.15648517E-03	0.12509402E-01
Northings	0.0283	0.46027312E-03	0.21453980E-01
Speed	0.0339	0.28647832E-03	0.16925678E-01

Vector mean speed 0.0286
 Vector Mean Direction 8.6

Maximum ten values

Eastings					Northings				
0.040	0.039	0.031	0.029	0.028	0.067	0.066	0.065	0.064	0.064
0.027	0.026	0.024	0.023	0.023	0.064	0.063	0.060	0.059	0.056

Minimum ten values

Eastings					Northings				
-0.010	-0.012	-0.012	-0.014	-0.015	0.003	-0.002	-0.005	-0.007	-0.009
-0.015	-0.016	-0.017	-0.017	-0.018	-0.013	-0.015	-0.019	-0.024	-0.027

Maximum speeds

0.077	0.075	0.070	0.066	0.065	0.064	0.064	0.063	0.061	0.059
0.058	0.057	0.054	0.053	0.052	0.052	0.051	0.051	0.049	0.048
0.046	0.046	0.046	0.045	0.045	0.042	0.041	0.040	0.040	0.040
0.040	0.039	0.039	0.039	0.039	0.039	0.039	0.038	0.037	0.037
0.037	0.036	0.035	0.035	0.034	0.034	0.034	0.033	0.032	0.032
0.032	0.031	0.031	0.030	0.029	0.027	0.027	0.027	0.027	0.026
0.026	0.026	0.026	0.026	0.025	0.025	0.024	0.023	0.023	0.023
0.022	0.022	0.022	0.021	0.021	0.020	0.020	0.019	0.019	0.019
0.019	0.017	0.016	0.016	0.015	0.015	0.015	0.015	0.013	0.012
0.009	0.008	0.007	0.005	0.005	0.004	0.003			

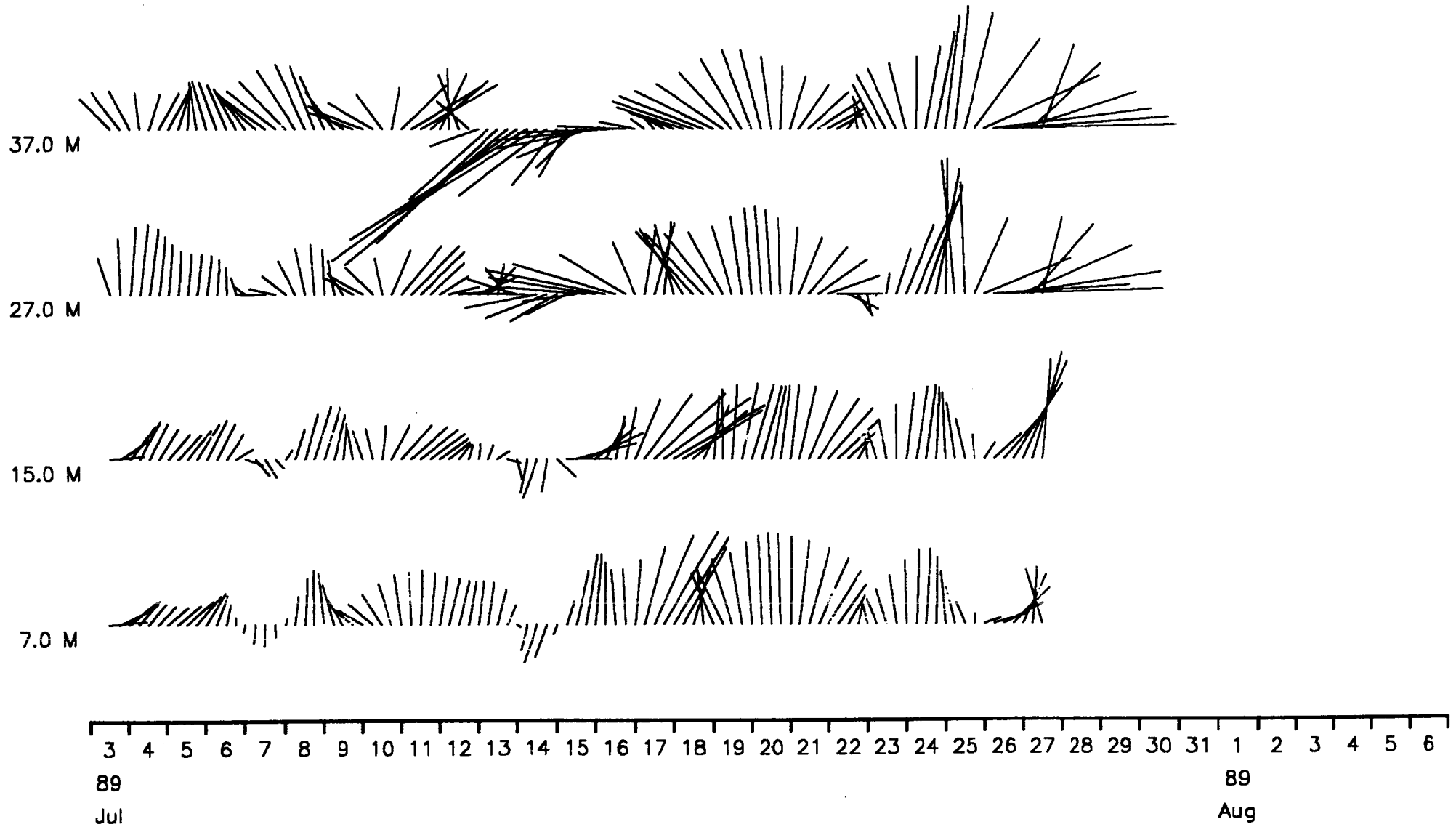
Variance ellipse statistics

Maximum variance 0.4660E-03	Direction	7.7
Minimum variance 0.1508E-03	Direction	97.7
Total variance 0.6167E-03	Ratio of variances	0.3236E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		2.0
Average direction. maxdir +PI/2 to maxdir -PI/2		176.9

STICK TIME SERIES PLOT

Rig no. C55BC Depth of water(m) 52.0
 Start/End 1989/06/30 AT 13:01:00 1989/07/30 AT 17:04:00
 Position 55 30.13N 05 30.31E
 Filtered Series Scale 0.1 m/s

Meter No.	Meter Height
9419	7.0 M
1113	15.0 M
1119	27.0 M
1264	37.0 M



Rig information details for C57BC

Position Latitude	:	55 30.16N
Position Longitude	:	05 30.43E
Water depth	:	52.0 m
Deployed on cruise	:	C57
Recovered on cruise	:	C59
Site name identification	:	B
Magnetic deviation	:	2.8 degrees west
Rig deployed on	:	30-JULY-89 18:40:00
Rig recovered on	:	29-AUG-89 16:49:00
Period of deployment	:	29.9 days
Comments	:	Launch and recovery successful

Meter information details for 1264

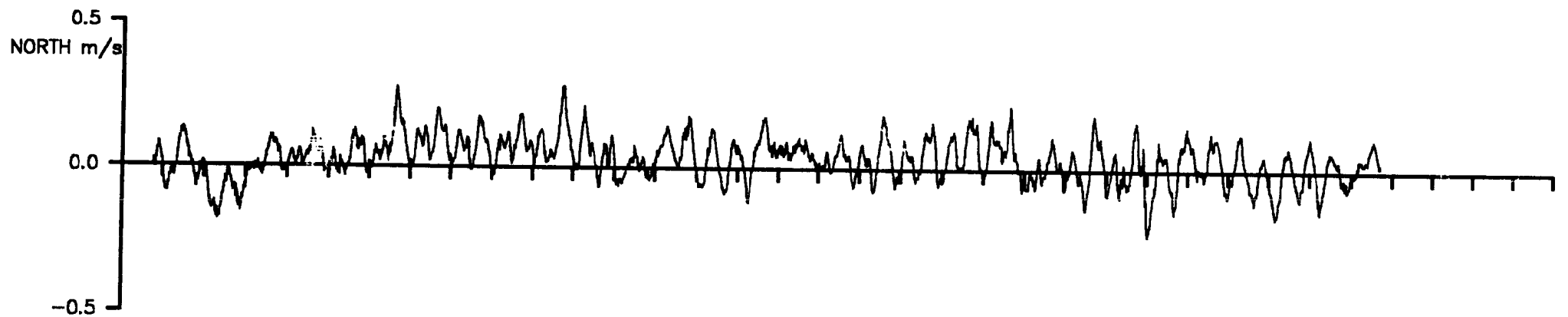
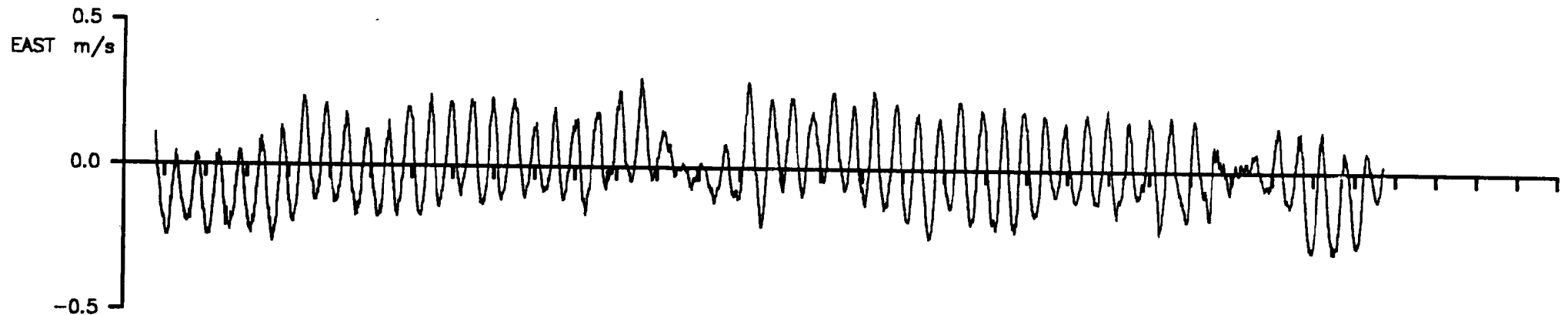
Rig No	:	C57BC
Meter No	:	1264
Recording interval	:	600.0 seconds
Meter height from bottom	:	37.0 m
Position of meter on rig	:	T
Meter type	:	S4
Meter started	:	30-JULY-89 18:07:00
Meter stopped	:	29-AUG-89 17:08:00
Period switched on	:	30.0 days
Period of good data	:	29.9 days
Total number of scans	:	4309
Timing error	:	60 seconds slow
Comments	:	Hourly time stamp has jumped by one minute at: (1) 18-AUG-89 20:07 to 21:08

VELOCITY COMPONENT TIME SERIES PLOT

Meter no. 1264 Rig no. C57BC Depth of water(m) 52.0

Start/End 1989/07/30 AT 18:40:00 1989/08/29 AT 16:49:00

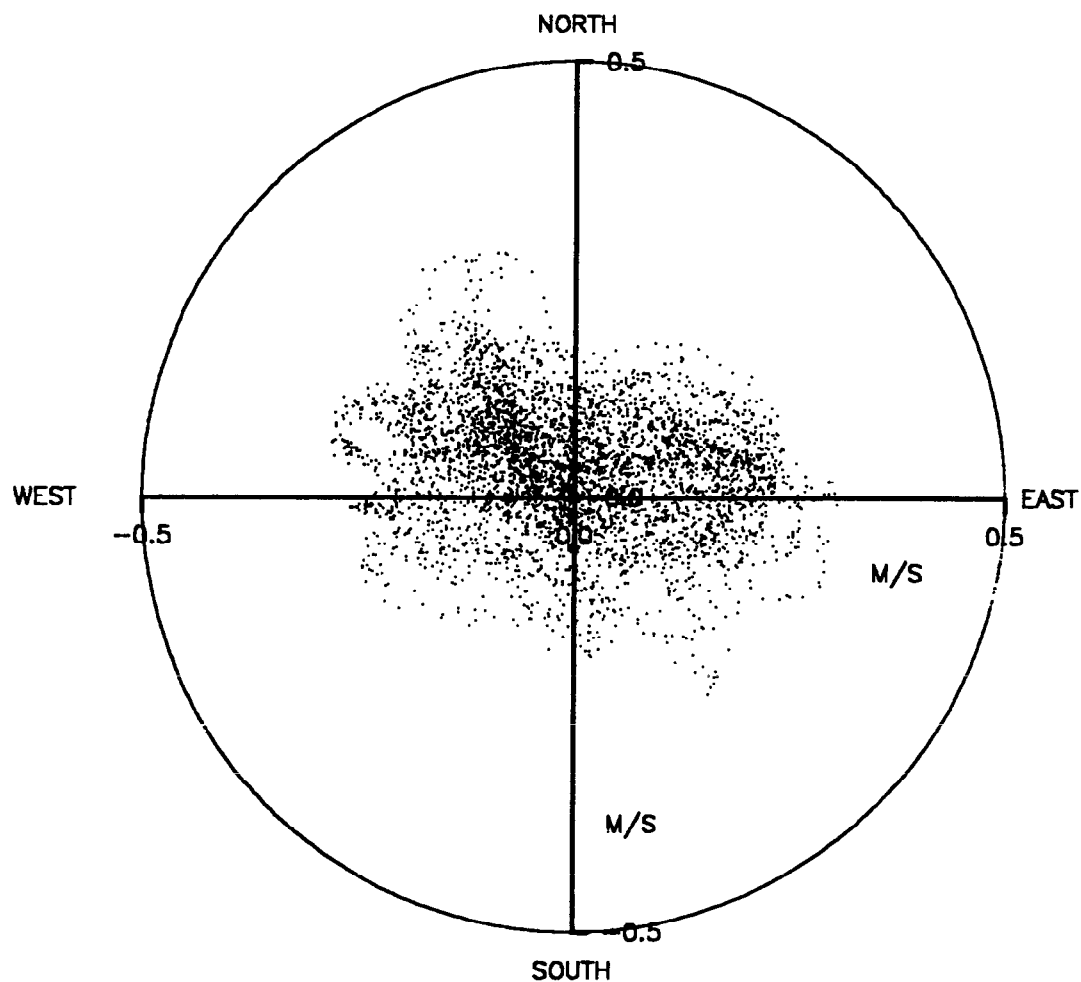
Position 55 30.16N 05 30.43E Meter Height(m) 37.0



30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2
89 89
Jul Aug Sep

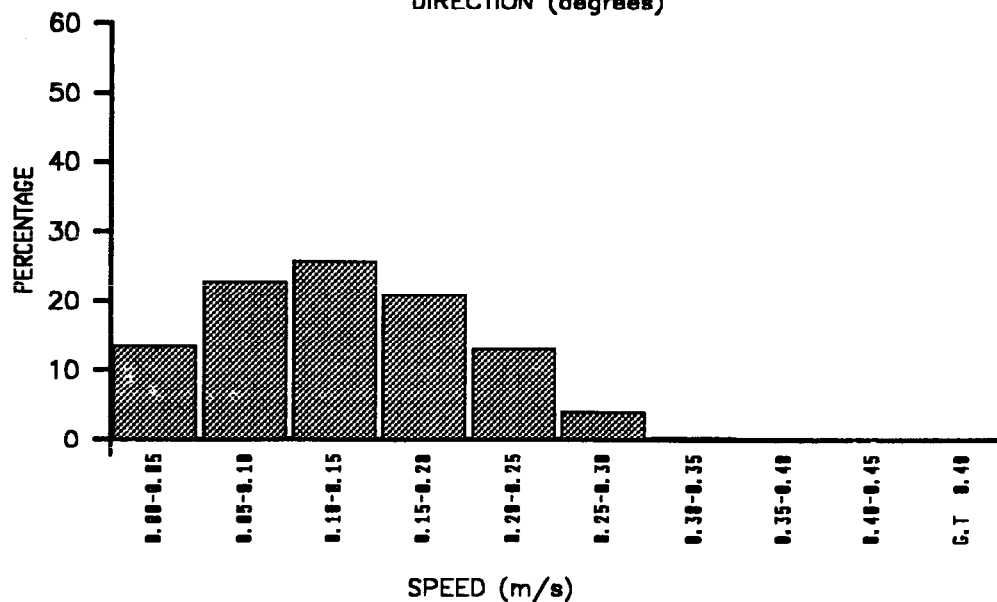
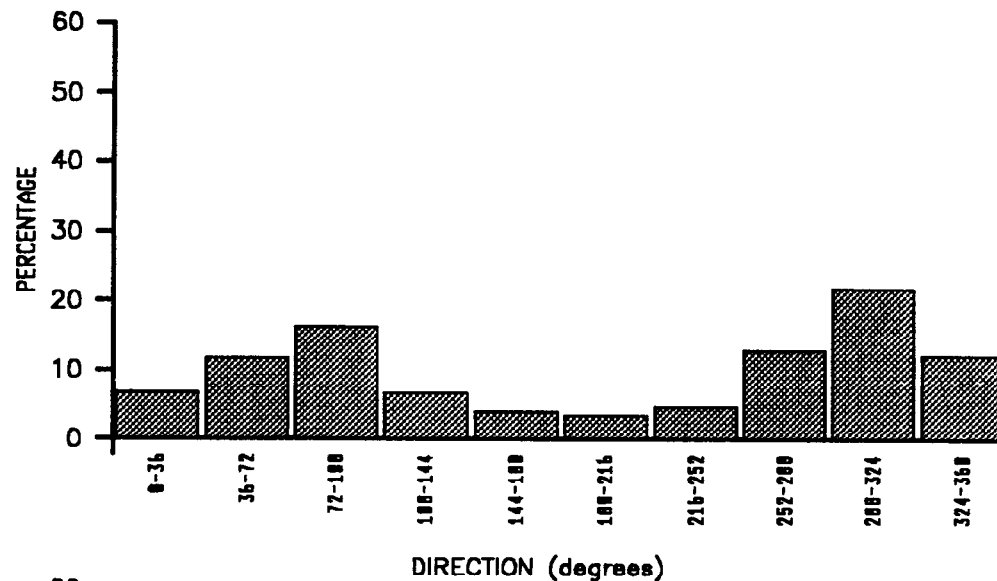
SCATTER PLOT

Meter no. 1264 Rig no. C57BC Depth of water(m) 52.0
 Start/End 1989/07/30 AT 18:40:00 1989/08/29 AT 16:49:00
 Position 55 30.16N 05 30.43E Meter Height(m) 37.0



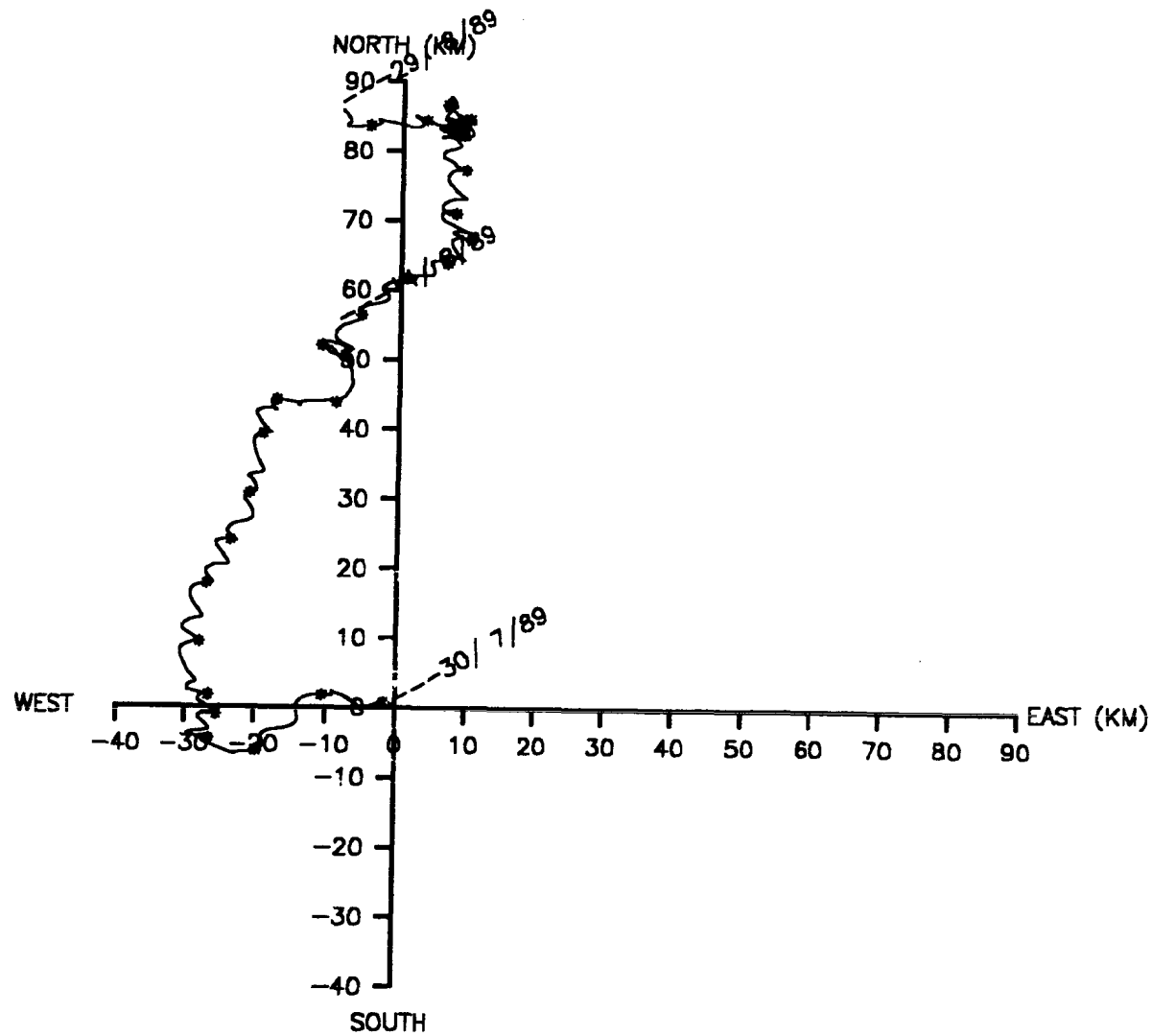
HISTOGRAMS FOR SPEEDS AND DIRECTIONS

Meter no. 1264 Rig no. C57BC Depth of water(m) 52.0
 Start/End 1989/07/30 AT 18:40:00 1989/08/29 AT 16:49:00
 Position 55 30.16N 05 30.43E Meter Height(m) 37.0



VECTOR PLOT

Meter no. 1264 Rig no. C57BC Depth of water(m) 52.0
Start/End 1989/07/30 AT 18:40:00 1989/08/29 AT 16:49:00
Position 55 30.16N 05 30.43E Meter Height(m) 37.0



STATISTICS FOR S41264T C57BCS A

	Mean	Variance	Standard deviation
Eastings	-0.0033	0.14935177E-01	0.12220955E+00
Northings	0.0332	0.52111298E-02	0.72188139E-01
Speed	0.1295	0.44964366E-02	0.67055464E-01

Vector mean speed 0.0334
 Vector Mean Direction -5.7

Maximum ten values									
Eastings					Northings				
0.305	0.302	0.302	0.300	0.296	0.280	0.280	0.279	0.278	0.275
0.295	0.295	0.291	0.290	0.290	0.273	0.271	0.270	0.270	0.269

Minimum ten values									
Eastings					Northings				
-0.269	-0.269	-0.272	-0.276	-0.276	-0.195	-0.200	-0.201	-0.205	-0.206
-0.277	-0.277	-0.279	-0.279	-0.281	-0.206	-0.214	-0.218	-0.218	-0.227

Maximum speeds									
0.314	0.310	0.309	0.307	0.305	0.303	0.303	0.302	0.302	0.302
0.300	0.300	0.299	0.299	0.299	0.296	0.296	0.296	0.294	0.294
0.294	0.293	0.292	0.292	0.292	0.290	0.290	0.290	0.290	0.289
0.289	0.288	0.288	0.288	0.287	0.287	0.287	0.287	0.286	0.286
0.285	0.285	0.284	0.284	0.283	0.282	0.282	0.282	0.281	0.281
0.279	0.278	0.277	0.277	0.277	0.277	0.276	0.276	0.276	0.276
0.275	0.275	0.274	0.273	0.273	0.273	0.273	0.273	0.272	0.271
0.271	0.271	0.271	0.271	0.270	0.270	0.270	0.270	0.270	0.269
0.269	0.269	0.268	0.268	0.268	0.268	0.268	0.267	0.267	0.267
0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.265	0.265	0.265

Variance ellipse statistics

Maximum variance 0.1534E-01	Direction	-78.7
Minimum variance 0.4807E-02	Direction	11.3
Total variance 0.2015E-01	Ratio of variances	0.3134E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		32.8
Average direction. maxdir +PI/2 to maxdir -PI/2		166.3

STATISTICS FOR S41264T C57BCSF A

	Mean	Variance	Standard deviation
Eastings	0.0159	0.11920899E-02	0.34526650E-01
Northings	0.0448	0.11585085E-02	0.34036875E-01
Speed	0.0602	0.97002811E-03	0.31145275E-01

Vector mean speed 0.0475
 Vector Mean Direction 19.6

Maximum ten values

Eastings					Northings				
0.104	0.097	0.094	0.080	0.080	0.107	0.105	0.103	0.103	0.102
0.077	0.077	0.075	0.073	0.071	0.101	0.099	0.095	0.094	0.093

Minimum ten values

Eastings					Northings				
-0.024	-0.026	-0.030	-0.033	-0.033	-0.002	-0.002	-0.004	-0.006	-0.006
-0.034	-0.038	-0.041	-0.042	-0.065	-0.006	-0.016	-0.019	-0.023	-0.027

Maximum speeds

0.108	0.107	0.106	0.105	0.104	0.104	0.104	0.102	0.102	0.102
0.101	0.099	0.099	0.097	0.096	0.096	0.095	0.094	0.094	0.093
0.091	0.089	0.088	0.088	0.088	0.087	0.087	0.085	0.083	0.082
0.081	0.081	0.080	0.079	0.078	0.078	0.077	0.077	0.076	0.075
0.074	0.072	0.070	0.066	0.066	0.064	0.063	0.062	0.061	0.059
0.058	0.054	0.051	0.051	0.051	0.051	0.050	0.050	0.049	0.049
0.048	0.047	0.045	0.045	0.045	0.044	0.043	0.042	0.041	0.040
0.038	0.034	0.031	0.030	0.028	0.024	0.023	0.023	0.023	0.022
0.022	0.022	0.020	0.019	0.019	0.019	0.015	0.014	0.014	0.014
0.013	0.010	0.010	0.009	0.006	0.004				

Variance ellipse statistics

Maximum variance 0.1206E-02	Direction	61.6
Minimum variance 0.1145E-02	Direction	151.6
Total variance 0.2351E-02	Ratio of variances	0.9490E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		-32.7
Average direction. maxdir +PI/2 to maxdir -PI/2		219.2

Meter information details for 1119

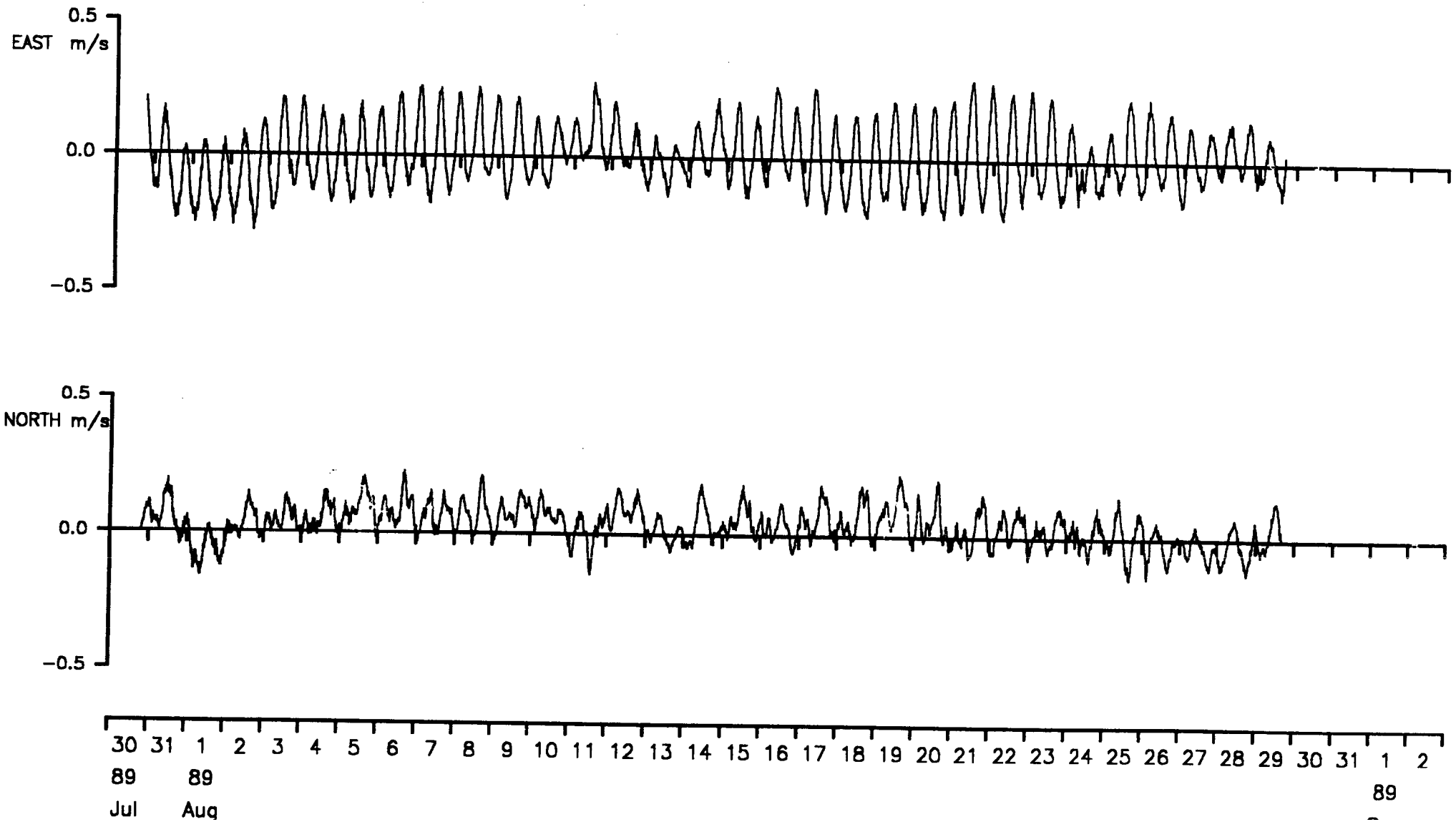
Rig No	:	C57BC
Meter No	:	1119
Recording interval	:	600.0 seconds
Meter height from bottom	:	27.0 m
Position of meter on rig	:	MT
Meter type	:	S4
Meter started	:	30-JULY-89 18:11:00
Meter stopped	:	30-AUG-89 05:02:00
Period switched on	:	30.5 days
Period of good data	:	29.9 days
Total number of scans	:	4309
Timing error	:	60 seconds slow
Comments	:	Hourly time stamp has jumped by one minute at: (1) 24-AUG-89 20:11 to 21:12

VELOCITY COMPONENT TIME SERIES PLOT

Meter no. 1119 Rig no. C57BC Depth of water(m) 52.0

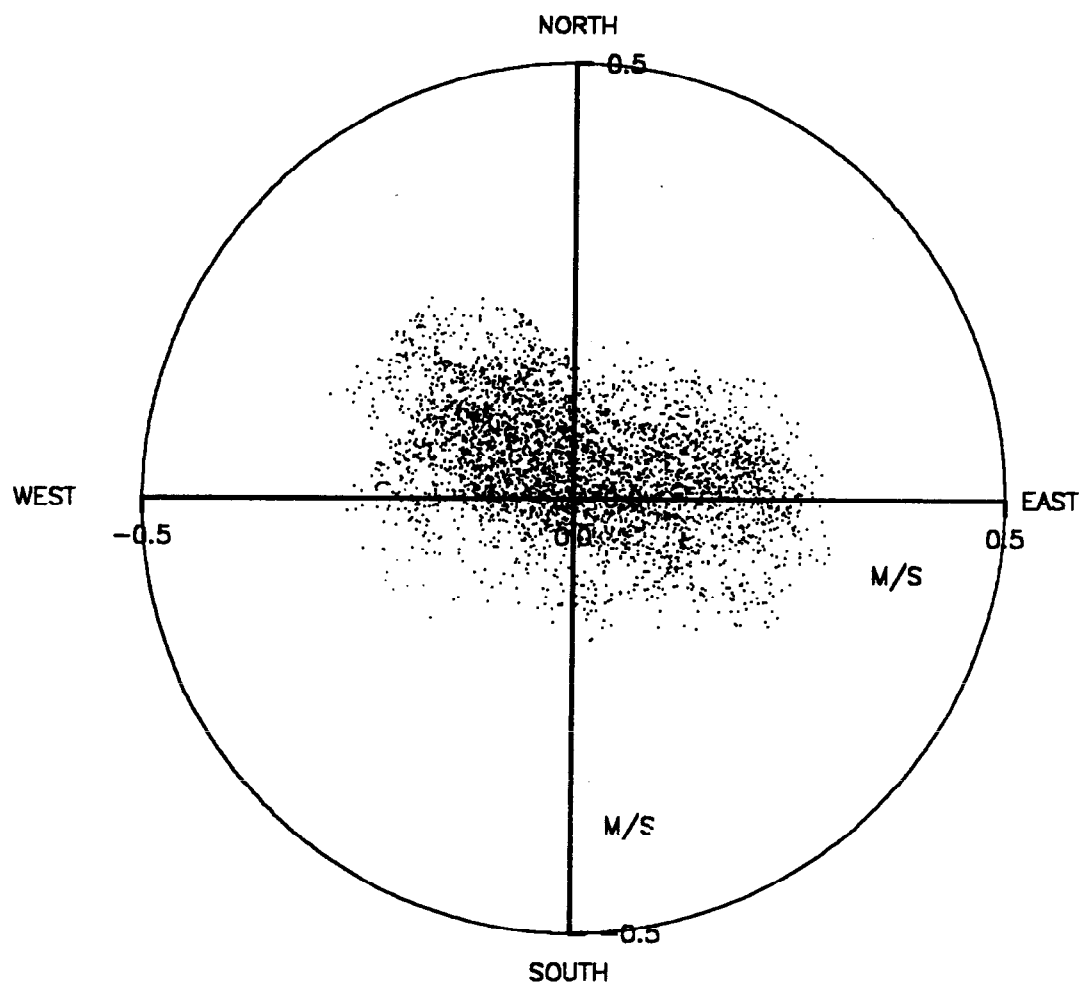
Start/End 1989/07/30 AT 18:40:00 1989/08/29 AT 16:49:00

Position 55 30.16N 05 30.43E Meter Height(m) 27.0



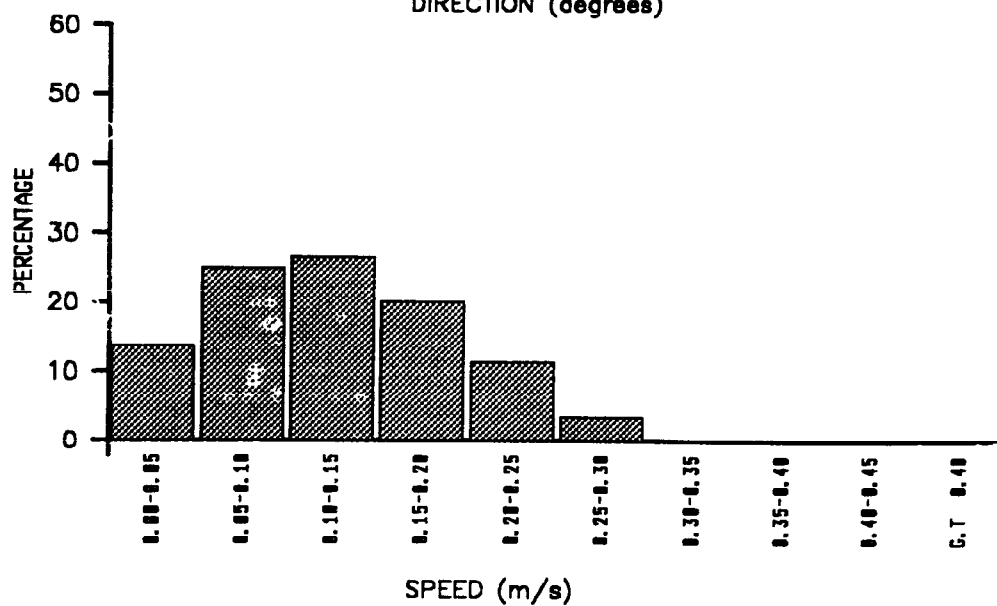
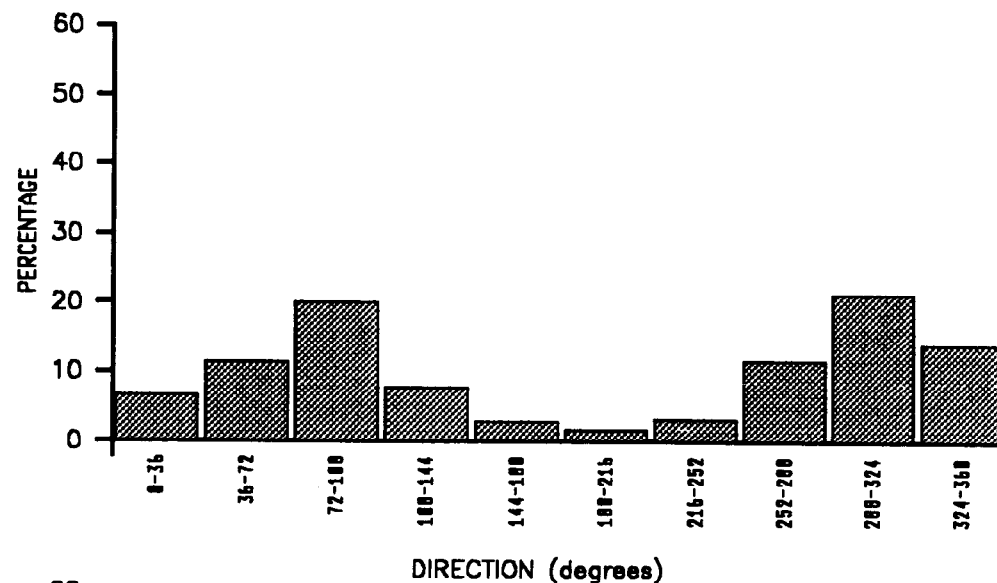
SCATTER PLOT

Meter no. 1119 Rig no. C57BC Depth of water(m) 52.0
Start/End 1989/07/30 AT 18:40:00 1989/08/29 AT 16:49:00
Position 55 30.16N 05 30.43E Meter Height(m) 27.0



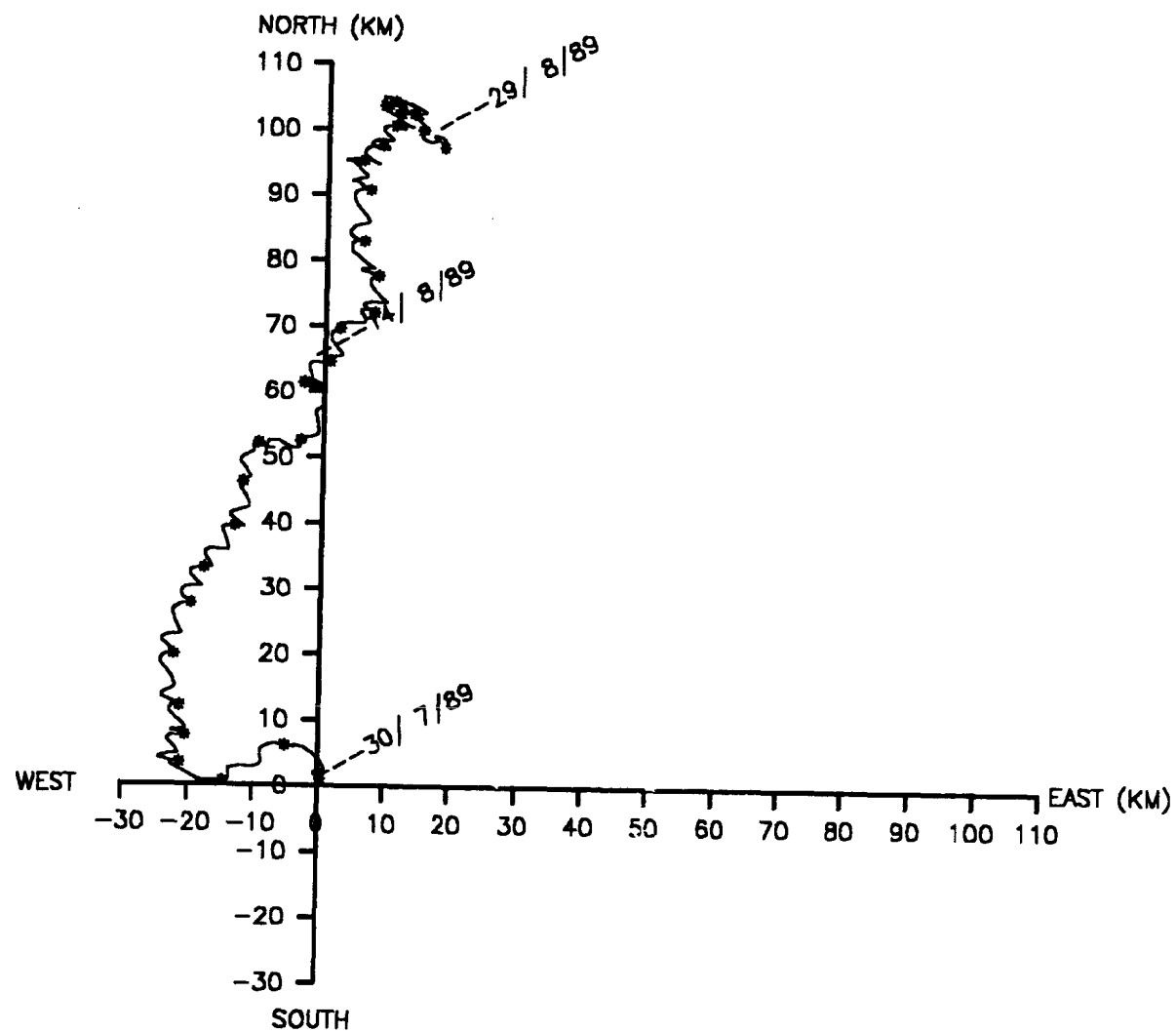
HISTOGRAMS FOR SPEEDS AND DIRECTIONS

Meter no. 1119 Rig no. C57BC Depth of water(m) 52.0
Start/End 1989/07/30 AT 18:40:00 1989/08/29 AT 16:49:00
Position 55 30.16N 05 30.43E Meter Height(m) 27.0



VECTOR PLOT

Meter no. 1119 Rig no. C57BC Depth of water(m) 52.0
Start/End 1989/07/30 AT 18:40:00 1989/08/29 AT 16:49:00
Position 55 30.16N 05 30.43E Meter Height(m) 27.0



STATISTICS FOR S41119MT C57BCS A

	Mean	Variance	Standard deviation
Eastings	0.0067	0.13993196E-01	0.11829281E+00
Northings	0.0383	0.44135489E-02	0.66434503E-01
Speed	0.1254	0.41919462E-02	0.64745188E-01

Vector mean speed 0.0389
Vector Mean Direction 9.9

Maximum ten values									
Eastings					Northings				
0.295	0.295	0.290	0.290	0.288	0.230	0.229	0.220	0.219	0.218
0.288	0.287	0.285	0.282	0.280	0.218	0.217	0.217	0.215	0.211

Minimum ten values									
Eastings					Northings				
-0.249	-0.250	-0.254	-0.254	-0.255	-0.145	-0.145	-0.146	-0.146	-0.147
-0.256	-0.258	-0.264	-0.264	-0.284	-0.147	-0.148	-0.149	-0.161	-0.163

Maximum speeds									
0.308	0.302	0.300	0.299	0.295	0.293	0.292	0.290	0.289	0.288
0.288	0.285	0.285	0.283	0.283	0.282	0.281	0.281	0.281	0.280
0.280	0.280	0.280	0.279	0.279	0.279	0.279	0.279	0.278	0.277
0.276	0.276	0.276	0.276	0.276	0.275	0.274	0.274	0.274	0.273
0.273	0.272	0.272	0.272	0.270	0.270	0.269	0.269	0.269	0.269
0.268	0.268	0.268	0.268	0.268	0.267	0.267	0.266	0.266	0.266
0.266	0.266	0.265	0.265	0.264	0.264	0.264	0.264	0.264	0.264
0.264	0.263	0.263	0.263	0.263	0.263	0.262	0.262	0.262	0.262
0.262	0.261	0.261	0.261	0.260	0.260	0.260	0.260	0.260	0.260
0.260	0.260	0.259	0.259	0.258	0.258	0.258	0.258	0.258	0.258

Variance ellipse statistics

Maximum variance 0.1479E-01	Direction	-74.5
Minimum variance 0.3620E-02	Direction	15.5
Total variance 0.1841E-01	Ratio of variances	0.2448E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		31.0
Average direction. maxdir +PI/2 to maxdir -PI/2		162.3

STATISTICS FOR S41119MT C57BCSF A

	Mean	Variance	Standard deviation
Eastings	0.0165	0.96896407E-03	0.31128187E-01
Northings	0.0489	0.91102417E-03	0.30183181E-01
Speed	0.0631	0.54491684E-03	0.23343455E-01

Vector mean speed 0.0516
 Vector Mean Direction 18.6

Maximum ten values

Eastings					Northings				
0.091	0.088	0.082	0.073	0.063	0.101	0.100	0.097	0.096	0.095
0.061	0.056	0.056	0.053	0.053	0.095	0.094	0.094	0.093	0.091

Minimum ten values

Eastings					Northings				
-0.027	-0.031	-0.032	-0.033	-0.033	0.010	0.009	0.001	0.001	-0.001
-0.033	-0.034	-0.036	-0.036	-0.063	-0.002	-0.006	-0.007	-0.013	-0.016

Maximum speeds

0.103	0.102	0.101	0.098	0.096	0.096	0.096	0.094	0.094	0.094
0.094	0.093	0.092	0.092	0.091	0.091	0.090	0.089	0.089	0.088
0.088	0.084	0.084	0.083	0.082	0.082	0.082	0.080	0.080	0.077
0.077	0.076	0.076	0.076	0.075	0.072	0.071	0.070	0.070	0.068
0.067	0.067	0.067	0.067	0.067	0.065	0.064	0.064	0.064	0.064
0.064	0.063	0.063	0.062	0.062	0.061	0.060	0.058	0.054	0.053
0.051	0.051	0.050	0.050	0.050	0.049	0.049	0.049	0.047	0.047
0.047	0.046	0.045	0.045	0.044	0.044	0.041	0.041	0.040	0.039
0.039	0.037	0.036	0.035	0.033	0.031	0.030	0.030	0.030	0.029
0.024	0.024	0.020	0.018	0.017	0.010				

Variance ellipse statistics

Maximum variance 0.1101E-02	Direction	-50.2
Minimum variance 0.7787E-03	Direction	39.8
Total variance 0.1880E-02	Ratio of variances	0.7071E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		51.1
Average direction. maxdir +PI/2 to maxdir -PI/2		116.2

Meter information details for 1113

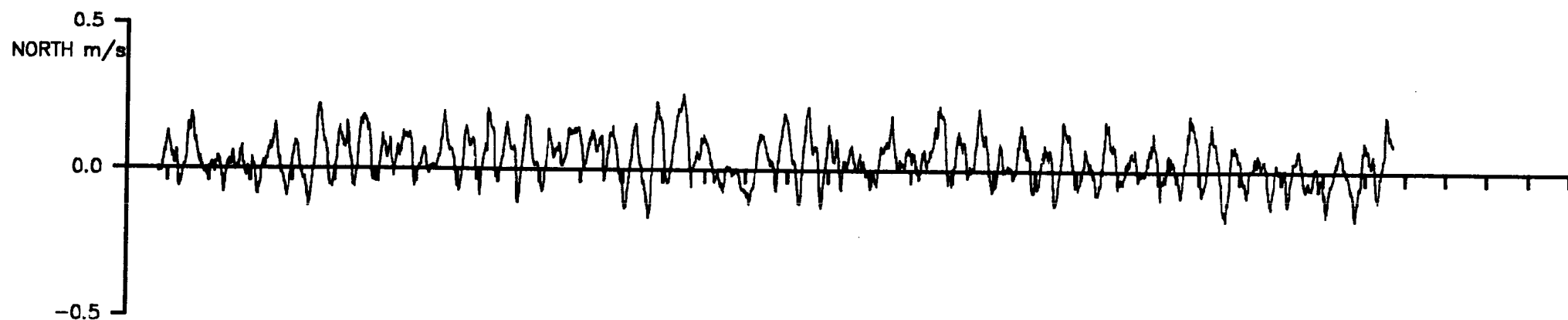
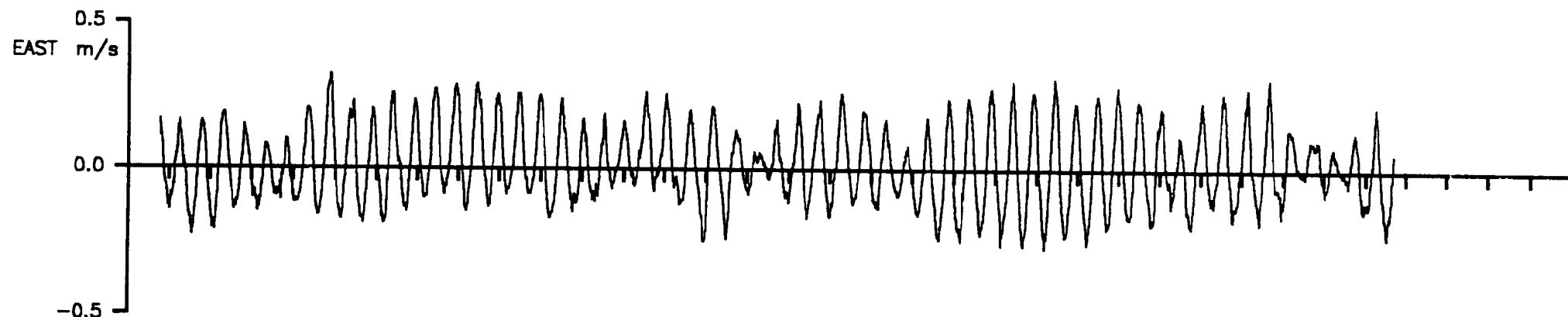
Rig No	:	C57BC
Meter No	:	1113
Recording interval	:	600.0 seconds
Meter height from bottom	:	15.0 m
Position of meter on rig	:	MB
Meter type	:	S4
Meter started	:	30-JULY-89 18:18:00
Meter stopped	:	29-AUG-89 17:18:00
Period switched on	:	30.0 days
Period of good data	:	29.9 days
Total number of scans	:	4309
Timing error	:	None
Comments	:	Good record obtained

VELOCITY COMPONENT TIME SERIES PLOT

Meter no. 1113 Rig no. C57BC Depth of water(m) 52.0

Start/End 1989/07/30 AT 18:40:00 1989/08/29 AT 16:49:00

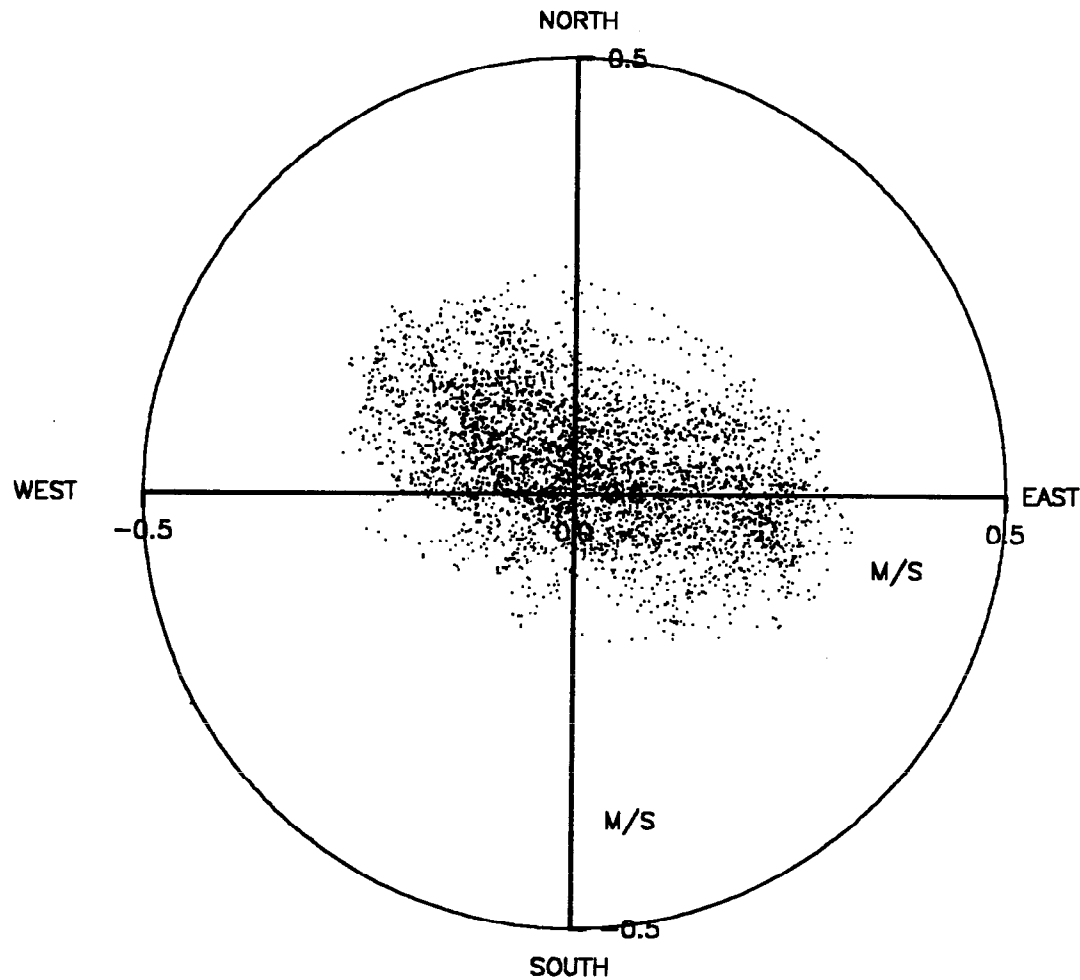
Position 55 30.16N 05 30.43E Meter Height(m) 15.0



30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2
89 89
Jul Aug Sep

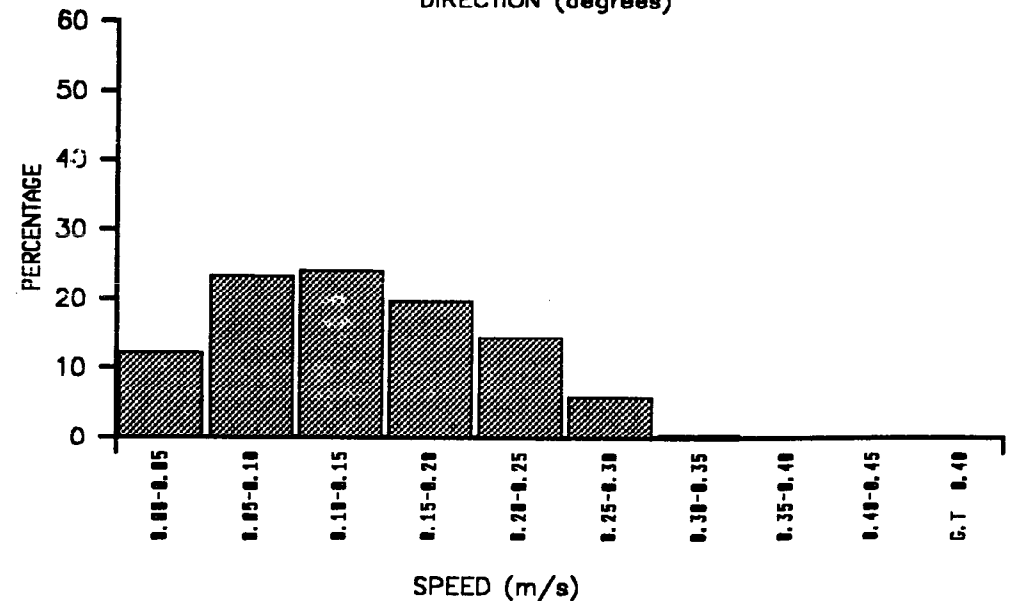
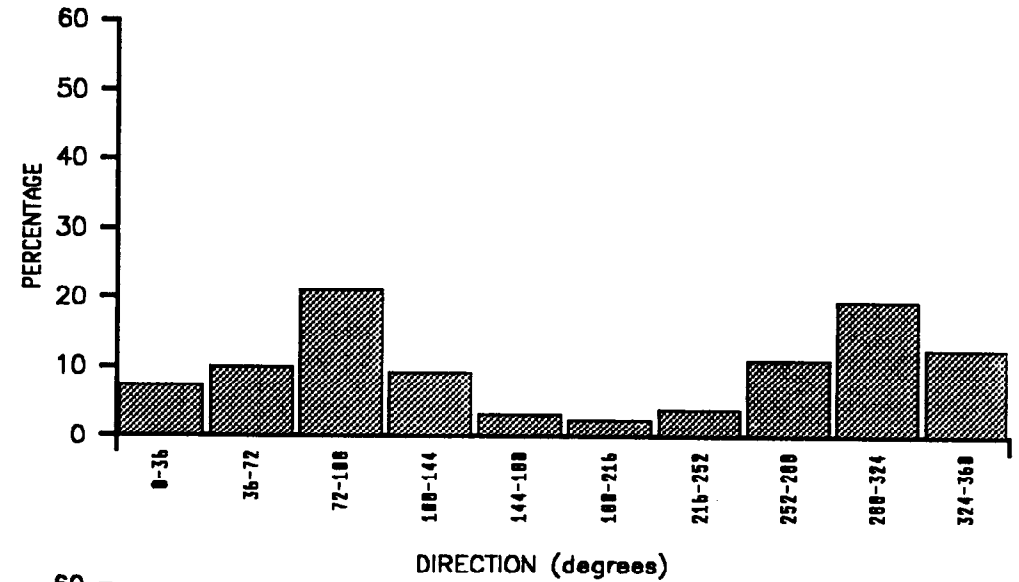
SCATTER PLOT

Meter no. 1113 Rig no. C57BC Depth of water(m) 52.0
 Start/End 1989/07/30 AT 18:40:00 1989/08/29 AT 16:49:00
 Position 55 30.16N 05 30.43E Meter Height(m) 15.0



HISTOGRAMS FOR SPEEDS AND DIRECTIONS

Meter no. 1113 Rig no. C57BC Depth of water(m) 52.0
 Start/End 1989/07/30 AT 18:40:00 1989/08/29 AT 16:49:00
 Position 55 30.16N 05 30.43E Meter Height(m) 15.0

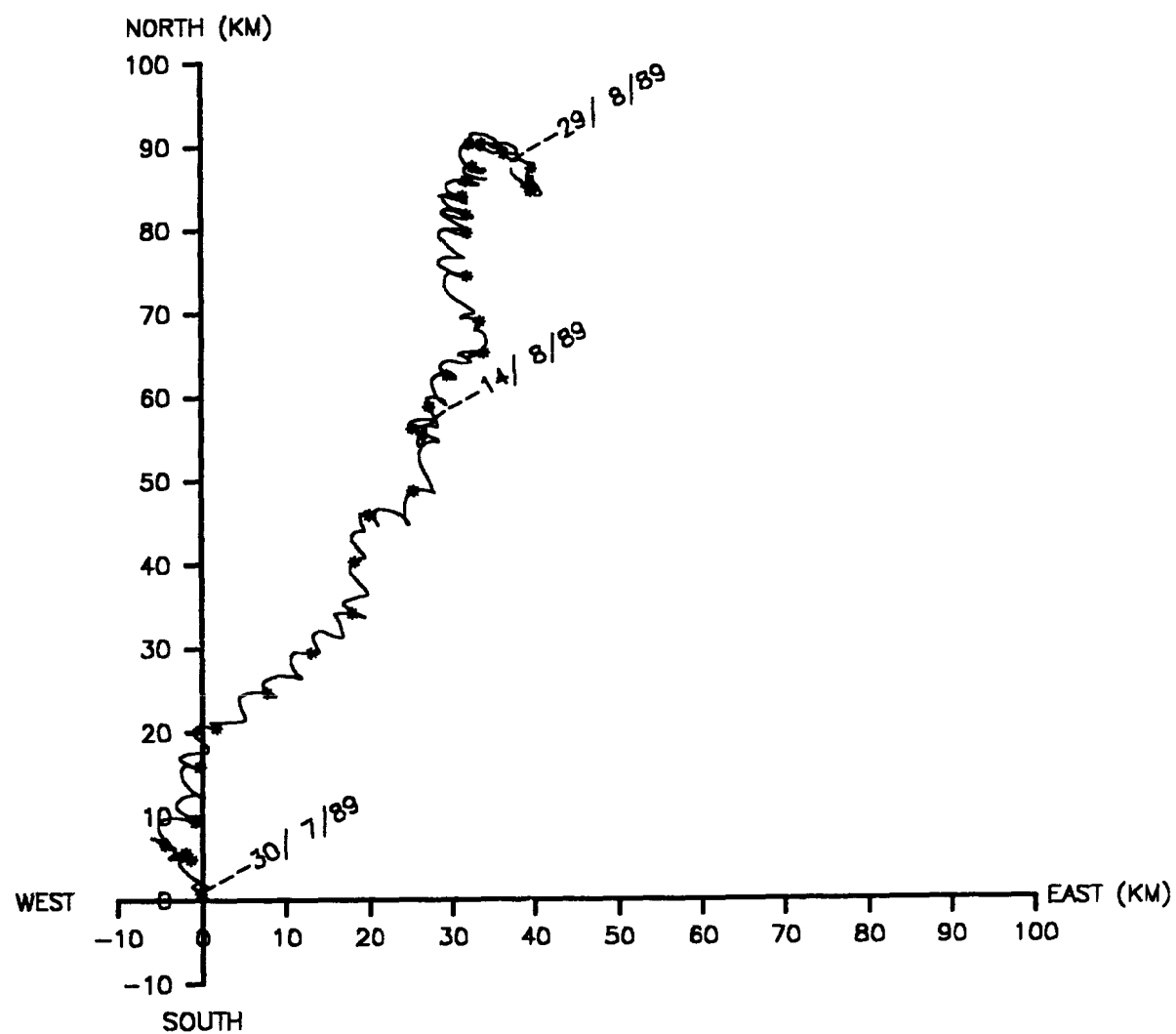


VECTOR PLOT

Meter no. 1113 Rig no. C57BC Depth of water(m) 52.0

Start/End 1989/07/30 AT 18:40:00 1989/08/29 AT 16:49:00

Position 55 30.16N 05 30.43E Meter Height(m) 15.0



STATISTICS FOR S41113MB C57BCS A

	Mean	Variance	Standard deviation
Eastings	0.0145	0.16225535E-01	0.12737948E+00
Northings	0.0337	0.54951645E-02	0.74129343E-01
Speed	0.1347	0.49170703E-02	0.70121825E-01

Vector mean speed 0.0367
 Vector Mean Direction 23.3

Maximum ten values

Eastings	Northings
----------	-----------

0.322	0.321	0.318	0.315	0.312	0.260	0.250	0.244	0.243	0.241
0.311	0.310	0.309	0.303	0.297	0.240	0.234	0.232	0.232	0.231

Minimum ten values

Eastings	Northings
----------	-----------

-0.246	-0.248	-0.249	-0.249	-0.256	-0.152	-0.153	-0.157	-0.161	-0.162
-0.259	-0.260	-0.260	-0.262	-0.269	-0.164	-0.166	-0.167	-0.167	-0.170

Maximum speeds

0.326	0.325	0.321	0.320	0.313	0.313	0.311	0.310	0.307	0.304
0.303	0.303	0.302	0.302	0.301	0.300	0.300	0.300	0.298	0.297
0.296	0.295	0.295	0.294	0.294	0.292	0.292	0.292	0.291	0.291
0.291	0.290	0.290	0.290	0.289	0.288	0.288	0.287	0.287	0.286
0.286	0.286	0.286	0.286	0.285	0.285	0.285	0.285	0.285	0.284
0.284	0.284	0.284	0.284	0.283	0.283	0.282	0.282	0.282	0.281
0.280	0.280	0.280	0.279	0.279	0.279	0.278	0.278	0.278	0.278
0.278	0.277	0.277	0.277	0.277	0.277	0.276	0.276	0.275	0.275
0.275	0.275	0.275	0.274	0.274	0.274	0.274	0.274	0.274	0.274
0.273	0.273	0.273	0.273	0.273	0.273	0.273	0.273	0.273	0.273

Variance ellipse statistics

Maximum variance 0.1763E-01 Direction -71.2

Minimum variance 0.4089E-02 Direction 18.8

Total variance 0.2172E-01 Ratio of variances 0.2319E+00

Average direction. maxdir -PI/2 to maxdir +PI/2 28.1

Average direction. maxdir +PI/2 to maxdir -PI/2 163.5

STATISTICS FOR S41113MB C57BCSF A

	Mean	Variance	Standard deviation
Eastings	0.0196	0.76199137E-03	0.27604196E-01
Northings	0.0401	0.86773420E-03	0.29457331E-01
Speed	0.0541	0.68431580E-03	0.26159428E-01

Vector mean speed 0.0446
Vector Mean Direction 26.0

Maximum ten values									
Eastings					Northings				
0.079	0.078	0.077	0.074	0.073	0.115	0.113	0.098	0.091	0.091
0.072	0.068	0.066	0.063	0.062	0.090	0.088	0.075	0.075	0.073

Minimum ten values									
Eastings					Northings				
-0.012	-0.015	-0.017	-0.018	-0.020	0.007	0.005	0.004	-0.006	-0.010
-0.024	-0.026	-0.028	-0.033	-0.034	-0.012	-0.013	-0.023	-0.027	-0.037

Maximum speeds									
0.117	0.115	0.104	0.098	0.093	0.093	0.092	0.091	0.091	0.090
0.090	0.089	0.089	0.088	0.087	0.085	0.080	0.079	0.078	0.077
0.077	0.077	0.077	0.077	0.074	0.073	0.073	0.071	0.071	0.069
0.068	0.067	0.067	0.067	0.067	0.067	0.065	0.063	0.062	0.062
0.059	0.059	0.058	0.058	0.057	0.056	0.056	0.053	0.052	0.051
0.051	0.048	0.048	0.046	0.046	0.045	0.044	0.041	0.040	0.040
0.040	0.040	0.038	0.037	0.035	0.035	0.035	0.034	0.033	0.033
0.032	0.031	0.031	0.031	0.029	0.028	0.027	0.027	0.025	0.024
0.024	0.023	0.023	0.022	0.022	0.022	0.021	0.020	0.020	0.020
0.019	0.019	0.019	0.018	0.015	0.013				

Variance ellipse statistics

Maximum variance 0.8682E-03	Direction	3.8
Minimum variance 0.7615E-03	Direction	93.8
Total variance 0.1630E-02	Ratio of variances	0.8772E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		17.3
Average direction. maxdir +PI/2 to maxdir -PI/2		136.7

Meter information details for 9069

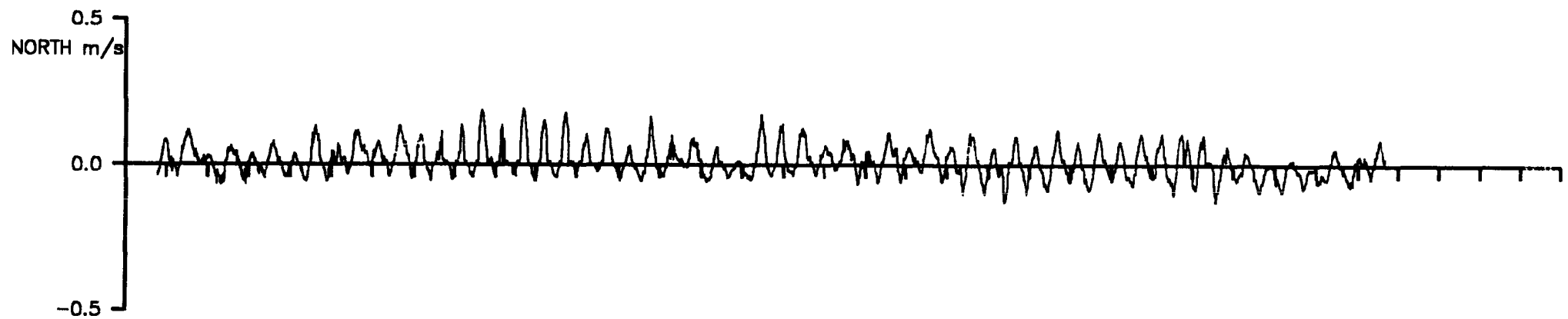
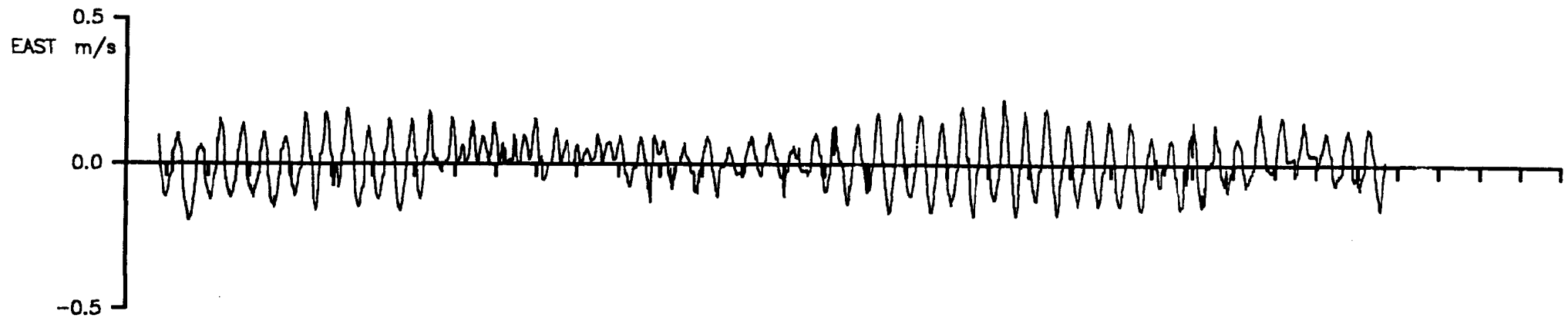
Rig No	:	C57BC
Meter No	:	9069
Recording interval	:	600.0 seconds
Meter height from bottom	:	7.0 m
Position of meter on rig	:	B
Meter type	:	AS
Meter started	:	30-JULY-89 11:10:00
Meter stopped	:	30-AUG-89 05:30:00
Period switched on	:	30.8 days
Period of good data	:	29.9 days
Total number of scans	:	4308
Timing error	:	None
Comments	:	Spikes present in parameter data and temperature values are a few degrees higher than CTD cast comparisons

VELOCITY COMPONENT TIME SERIES PLOT

Meter no. 9069 Rig no. C57BC Depth of water(m) 52.0

Start/End 1989/07/30 AT 18:40:00 1989/08/29 AT 16:49:00

Position 55 30.16N 05 30.43E Meter Height(m) 7.0



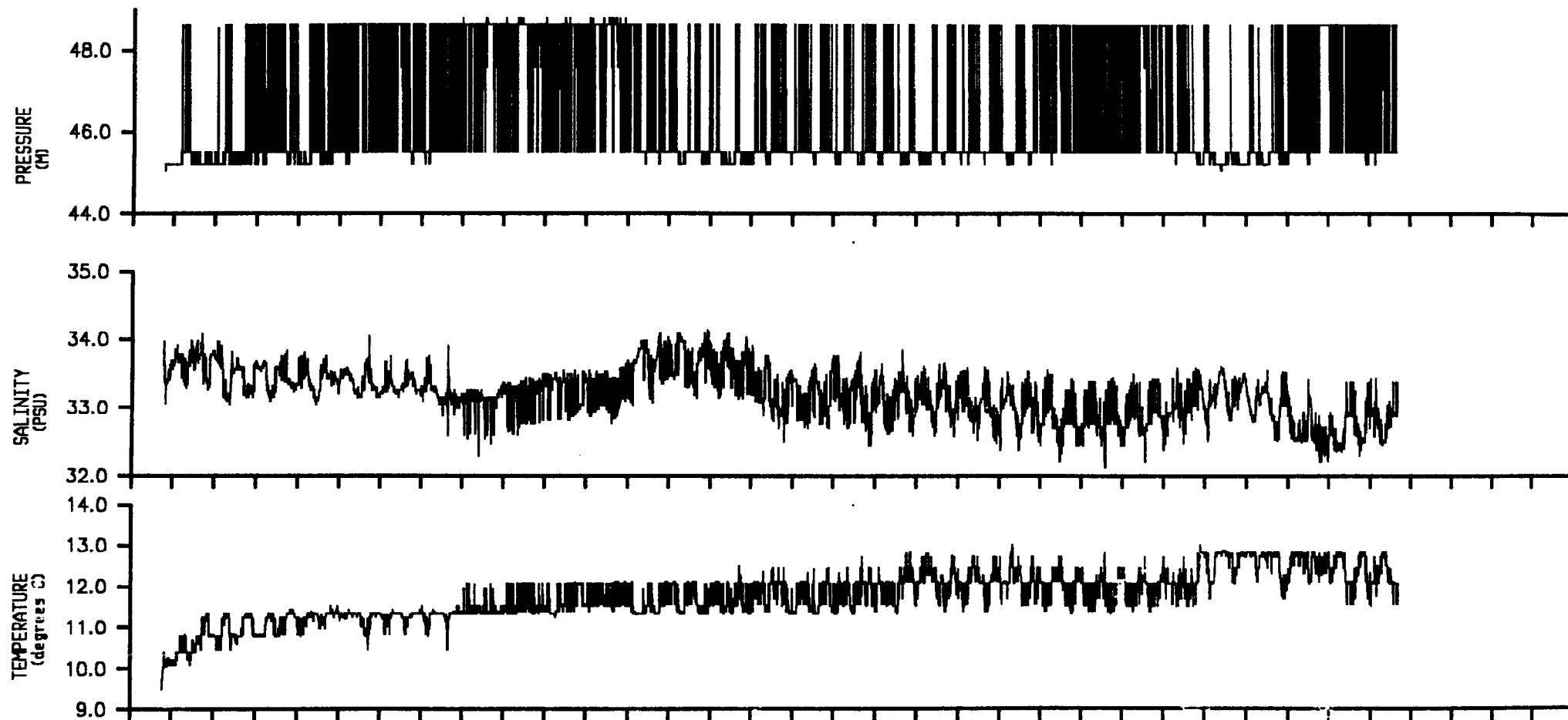
30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2
89 89
Jul Aug 89
Sen

TEMPERATURE,SALINITY AND PRESSURE TIME SERIES PLOTS

Meter no. 9069 Rig no. C57BC Depth of water(m) 52.0

Start/End 1989/07/30 AT 18:40:00 1989/08/29 AT 16:49:00

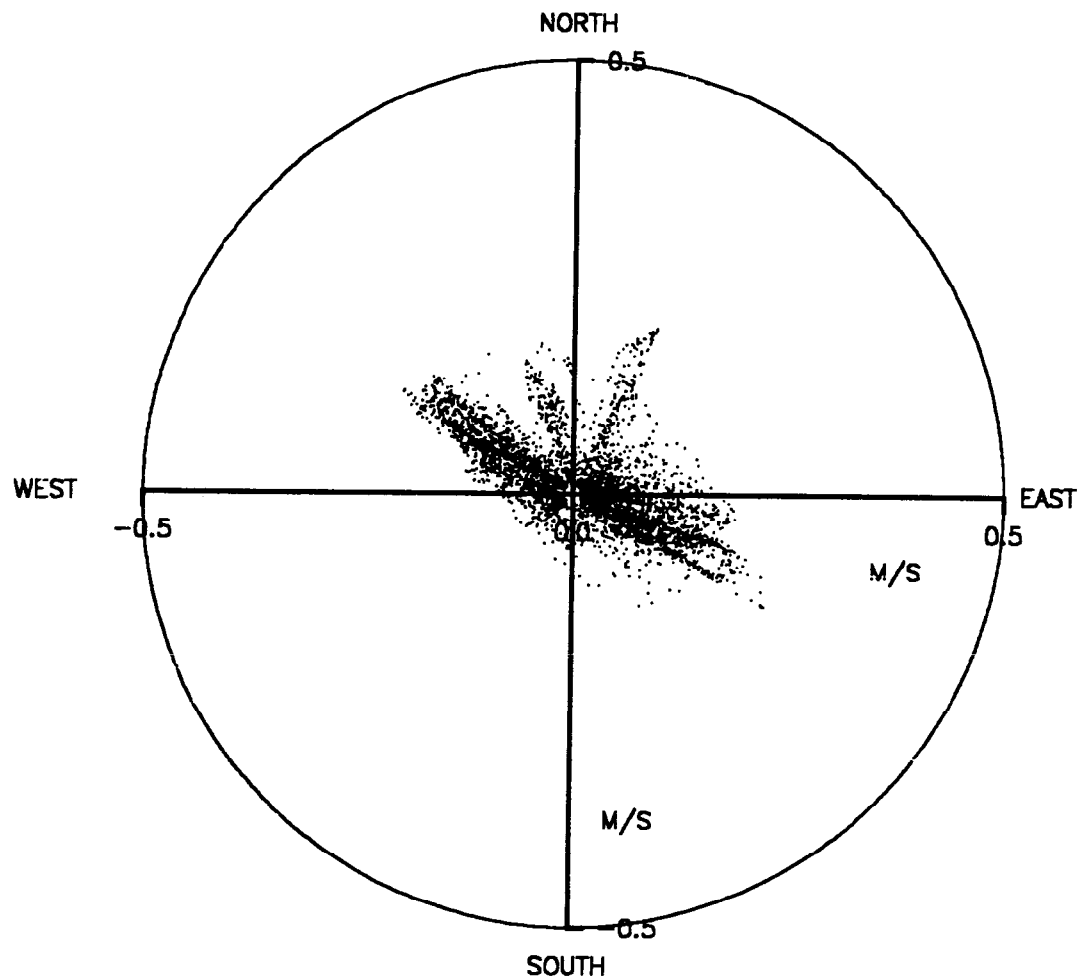
Position 55 30.16N 05 30.43E Meter Height(m) 7.0



30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2
89 89 89
Jul Aug Sep

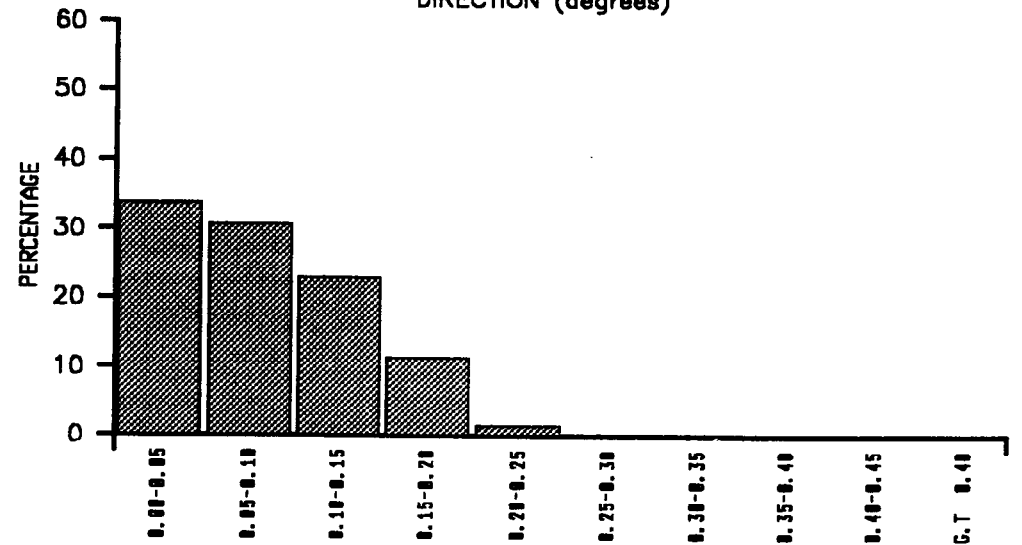
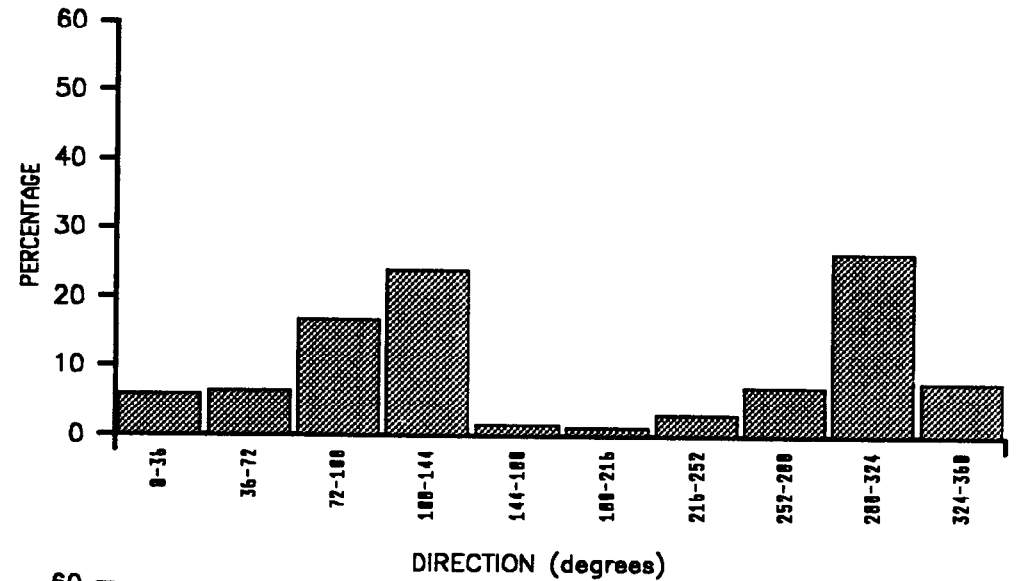
SCATTER PLOT

Meter no. 9069 Rig no. C57BC Depth of water(m) 52.0
 Start/End 1989/07/30 AT 18:40:00 1989/08/29 AT 16:49:00
 Position 55 30.16N 05 30.43E Meter Height(m) 7.0



HISTOGRAMS FOR SPEEDS AND DIRECTIONS

Meter no. 9069 Rig no. C57BC Depth of water(m) 52.0
 Start/End 1989/07/30 AT 18:40:00 1989/08/29 AT 16:49:00
 Position 55 30.16N 05 30.43E Meter Height(m) 7.0

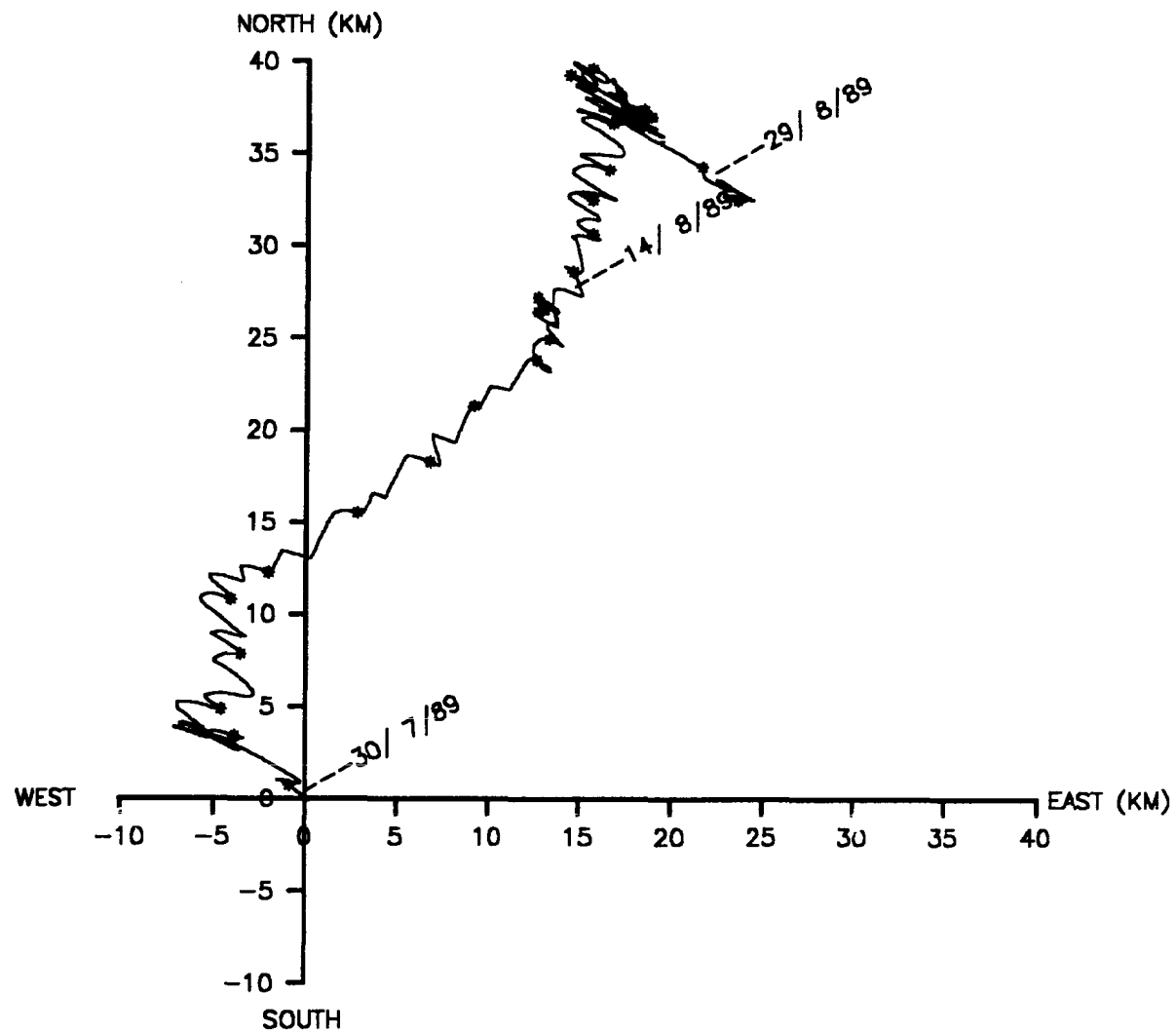


VECTOR PLOT

Meter no. 9069 Rig no. C57BC Depth of water(m) 52.0

Start/End 1989/07/30 AT 18:40:00 1989/08/29 AT 16:49:00

Position 55 30.16N 05 30.43E Meter Height(m) 7.0



STATISTICS FOR AS9069B C57BCS A

	Mean	Variance	Standard deviation
Eastings	0.0087	0.66620372E-02	0.81621289E-01
Northings	0.0130	0.26484709E-02	0.51463298E-01
Speed	0.0829	0.26869962E-02	0.51836241E-01

Vector mean speed 0.0156
 Vector Mean Direction 33.7

Maximum ten values

Eastings

Northings

0.223	0.221	0.220	0.218	0.218	0.191	0.188	0.187	0.187	0.186
0.208	0.204	0.201	0.198	0.195	0.186	0.184	0.184	0.182	0.179

Minimum ten values

Eastings

Northings

-0.180	-0.181	-0.182	-0.185	-0.186	-0.110	-0.111	-0.113	-0.113	-0.121
-0.189	-0.189	-0.193	-0.196	-0.197	-0.125	-0.127	-0.128	-0.128	-0.129

Maximum speeds

0.258	0.255	0.252	0.246	0.241	0.238	0.229	0.229	0.223	0.223
0.223	0.220	0.214	0.214	0.214	0.214	0.214	0.214	0.214	0.214
0.212	0.212	0.212	0.212	0.209	0.209	0.209	0.209	0.209	0.209
0.209	0.209	0.206	0.206	0.206	0.206	0.206	0.206	0.206	0.206
0.206	0.206	0.206	0.206	0.206	0.206	0.206	0.206	0.203	0.203
0.203	0.203	0.203	0.203	0.203	0.203	0.203	0.203	0.203	0.203
0.203	0.203	0.203	0.200	0.200	0.200	0.200	0.200	0.200	0.200
0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200
0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.197	0.197	0.197
0.197	0.197	0.197	0.197	0.197	0.197	0.197	0.197	0.197	0.197

Variance ellipse statistics

Maximum variance 0.8049E-02	Direction	-63.1
Minimum variance 0.1261E-02	Direction	26.9
Total variance 0.9310E-02	Ratio of variances	0.1567E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		17.0
Average direction. maxdir +PI/2 to maxdir -PI/2		163.4

STATISTICS FOR AS9069B C57BCSF A

	Mean	Variance	Standard deviation
Eastings	0.0104	0.36385586E-03	0.19075010E-01
Northings	0.0166	0.24295796E-03	0.15587110E-01
Speed	0.0270	0.25626621E-03	0.16008317E-01

Vector mean speed 0.0196
 Vector Mean Direction 32.2

Maximum ten values									
Eastings					Northings				
0.058	0.056	0.056	0.052	0.050	0.040	0.039	0.039	0.039	0.038
0.047	0.044	0.042	0.040	0.040	0.037	0.037	0.036	0.036	0.036

Minimum ten values									
Eastings					Northings				
-0.012	-0.013	-0.013	-0.013	-0.015	-0.006	-0.006	-0.008	-0.009	-0.009
-0.015	-0.018	-0.018	-0.019	-0.023	-0.011	-0.011	-0.014	-0.020	-0.026

Maximum speeds									
0.069	0.068	0.065	0.062	0.059	0.055	0.053	0.053	0.051	0.050
0.049	0.048	0.047	0.046	0.046	0.042	0.042	0.041	0.040	0.040
0.039	0.039	0.039	0.039	0.038	0.037	0.037	0.037	0.037	0.034
0.034	0.033	0.033	0.032	0.032	0.032	0.031	0.030	0.030	0.030
0.027	0.027	0.027	0.027	0.026	0.026	0.026	0.024	0.024	0.024
0.023	0.023	0.022	0.022	0.021	0.021	0.020	0.020	0.019	0.018
0.018	0.017	0.016	0.016	0.016	0.016	0.015	0.015	0.015	0.015
0.014	0.014	0.013	0.013	0.013	0.012	0.012	0.012	0.012	0.012
0.011	0.011	0.011	0.010	0.010	0.010	0.009	0.009	0.009	0.008
0.006	0.006	0.005	0.004	0.003	0.002				

Variance ellipse statistics

Maximum variance 0.4139E-03	Direction	61.6
Minimum variance 0.1930E-03	Direction	151.6
Total variance 0.6068E-03	Ratio of variances	0.4662E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		-21.5
Average direction. maxdir +PI/2 to maxdir -PI/2		219.3

STICK TIME SERIES PLOT

Rig no. C57BC Depth of water(m) 52.0

Start/End 1989/07/30 AT 18:40:00 1989/08/29 AT 16:49:00

Position 55 30.16N 05 30.43E

Filtered Series Scale 0.1 m/s

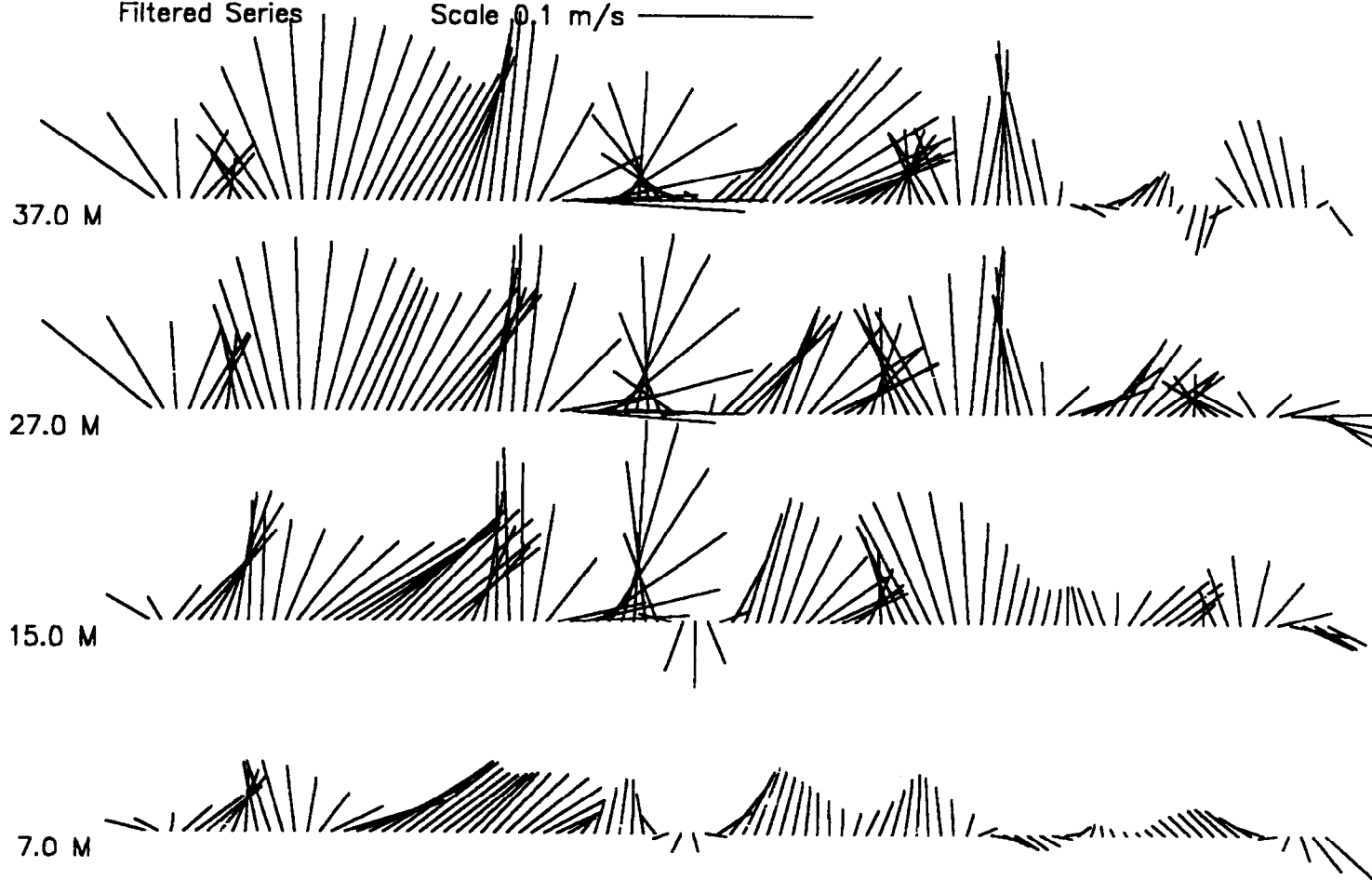
Meter No. Meter Height

9069 7.0 M

1113 15.0 M

1119 27.0 M

1264 37.0 M



2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5
89 Aug 89 Sep

Rig information details for C59BC

Position Latitude	:	55 30.03N
Position Longitude	:	05 30.60E
Water depth	:	52.0 m
Deployed on cruise	:	C59
Recovered on cruise	:	C61
Site name identification	:	B
Magnetic deviation	:	2.8 degrees west
Rig deployed on	:	29-AUG-89 18:01:00
Rig recovered on	:	28-SEPT-89 06:20:00
Period of deployment	:	29.5 days
Comments	:	Launch and recovery successful

Meter information details for 1264

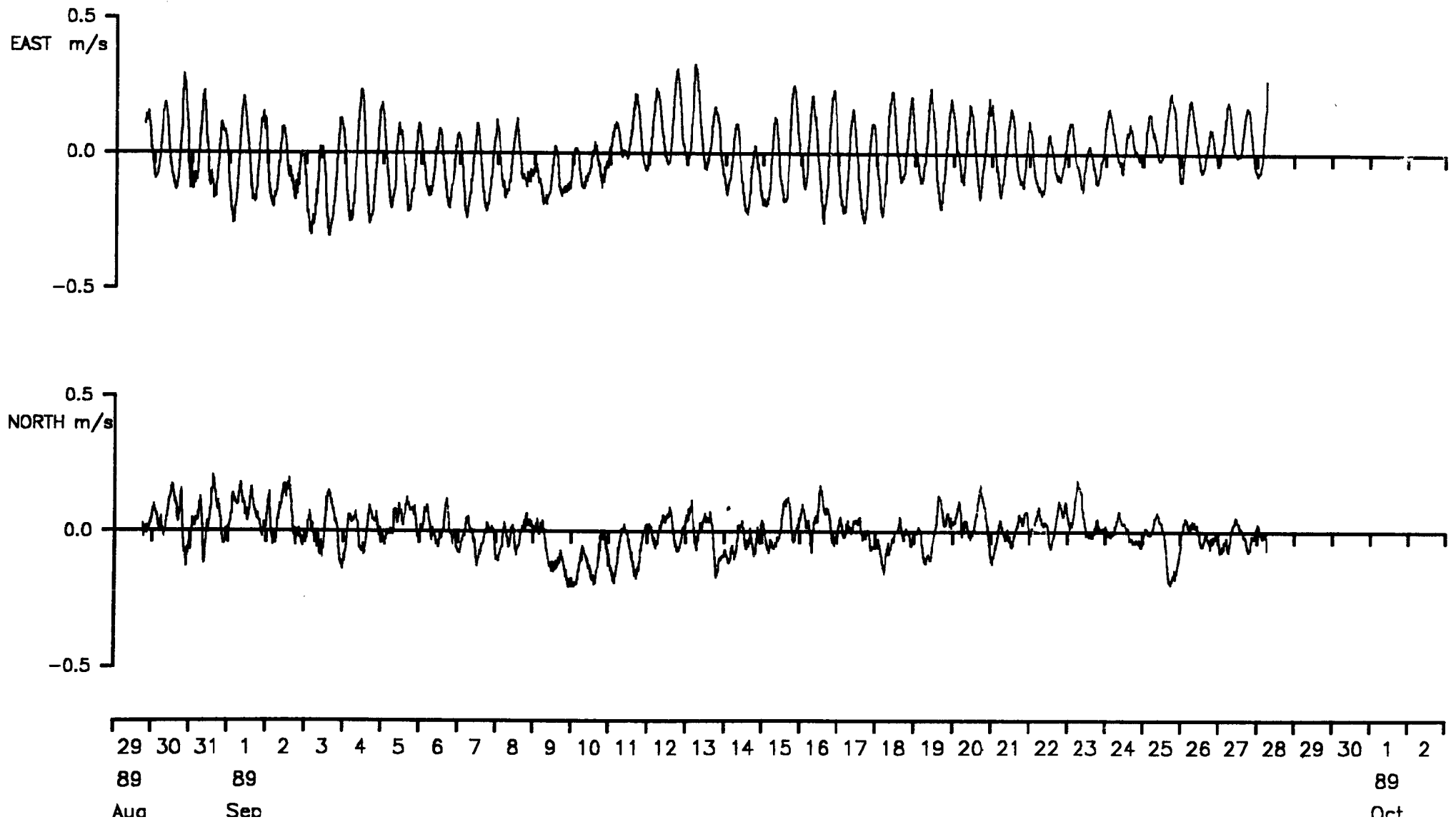
Rig No	:	C59BC
Meter No	:	1264
Recording interval	:	600.0 seconds
Meter height from bottom	:	37.0 m
Position of meter on rig	:	T
Meter type	:	S4
Meter started	:	29-AUG-89 17:45:00
Meter stopped	:	28-SEPT-89 08:26:00
Period switched on	:	29.6 days
Period of good data	:	29.5 days
Total number of scans	:	4250
Timing error	:	60 seconds slow
Comments	:	Hourly time stamp has jumped by one minute at: (1) 17-SEPT-89 20:45 to 21:46

VELOCITY COMPONENT TIME SERIES PLOT

Meter no. 1264 Rig no. C59BC Depth of water(m) 52.0

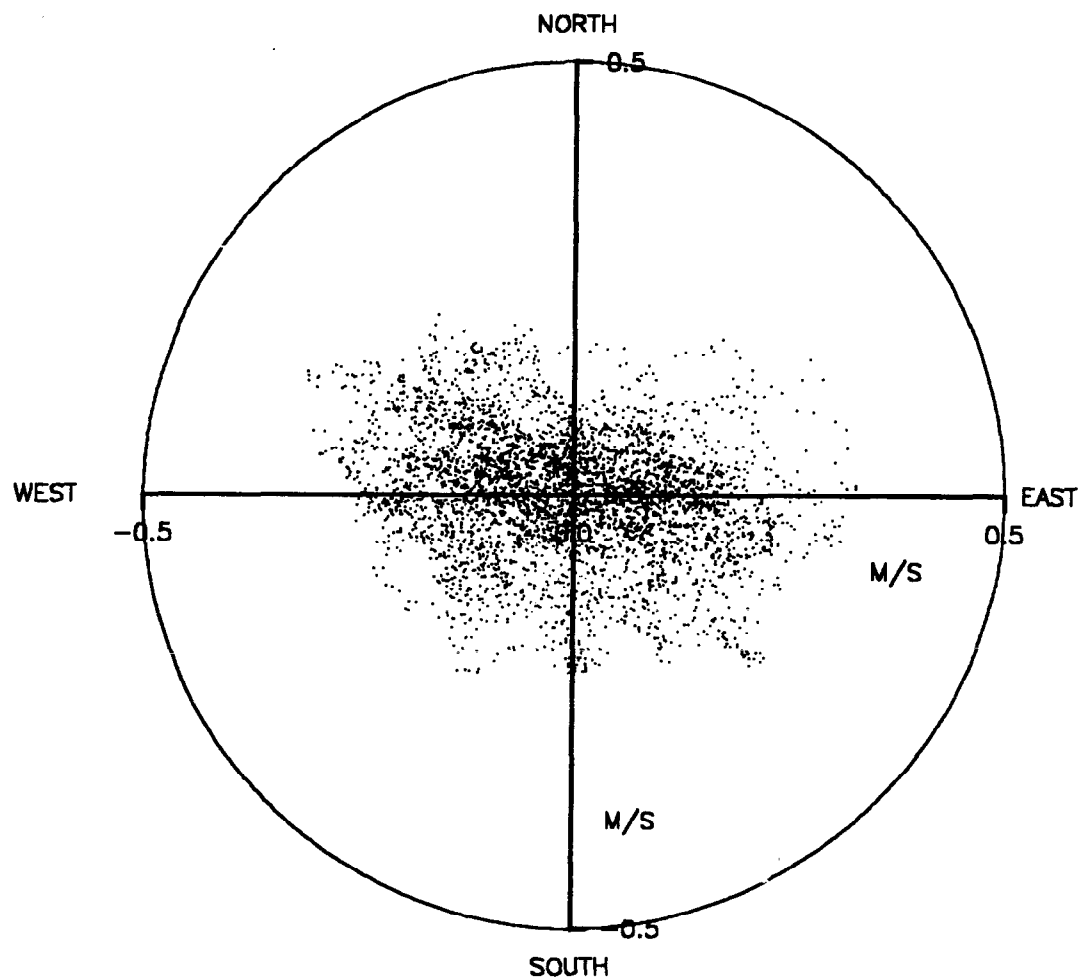
Start/End 1989/08/29 AT 18:01:00 1989/09/28 AT 06:20:00

Position 55 30.03N 05 30.60E Meter Height(m) 37.0



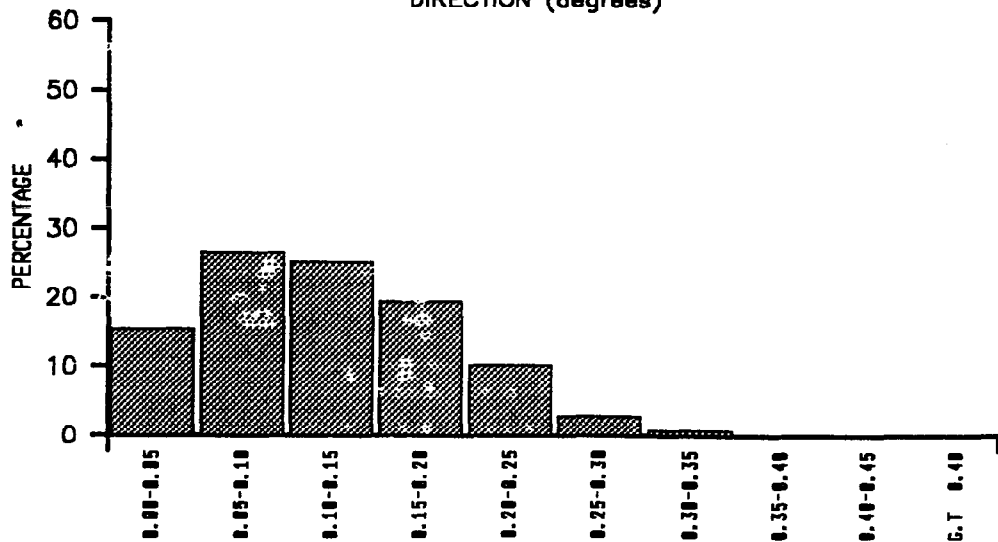
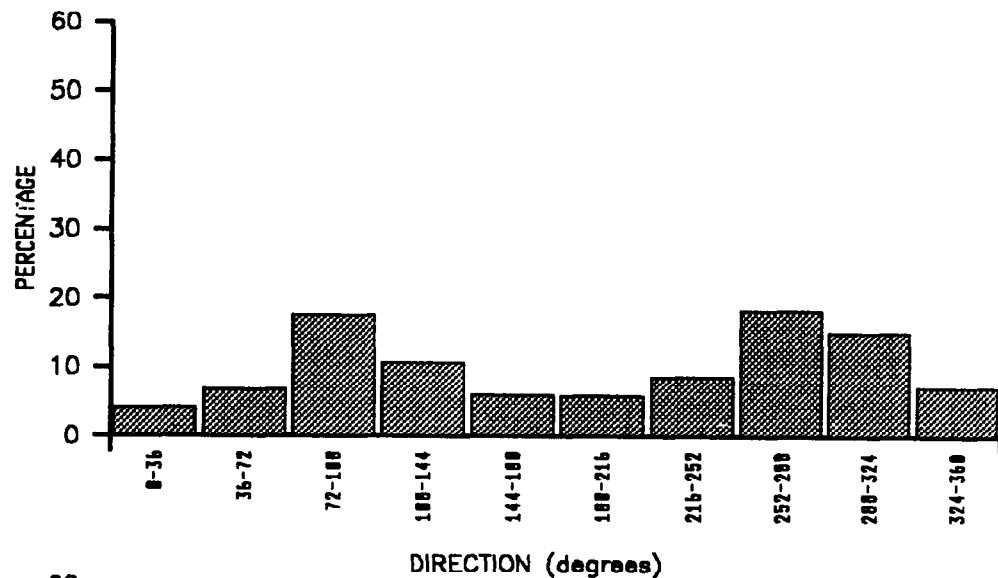
SCATTER PLOT

Meter no. 1264 Rig no. C59BC Depth of water(m) 52.0
 Start/End 1989/08/29 AT 18:01:00 1989/09/28 AT 06:20:00
 Position 55 30.03N 05 30.60E Meter Height(m) 37.0



HISTOGRAMS FOR SPEEDS AND DIRECTIONS

Meter no. 1264 Rig no. C59BC Depth of water(m) 52.0
 Start/End 1989/08/29 AT 18:01:00 1989/09/28 AT 06:20:00
 Position 55 30.03N 05 30.60E Meter Height(m) 37.0

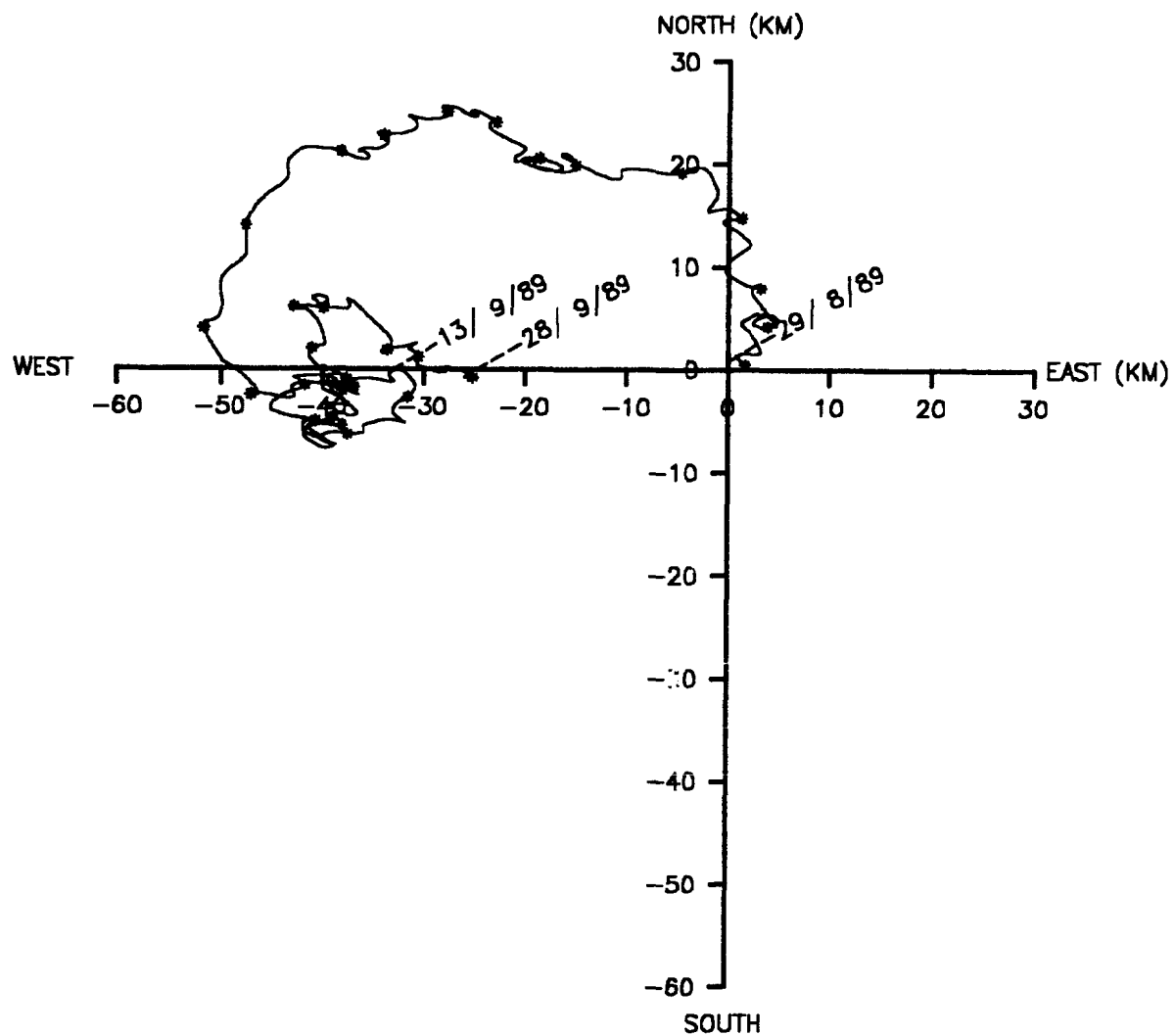


VECTOR PLOT

Meter no. 1264 Rig no. C59BC Depth of water(m) 52.0

Start/End 1989/08/29 AT 18:01:00 1989/09/28 AT 06:20:00

Position 55 30.03N 05 30.60E Meter Height(m) 37.0



STATISTICS FOR S41264T C59BCS A

	Mean	Variance	Standard deviation
Eastings	-0.0098	0.14158349E-01	0.11898881E+00
Northings	-0.0004	0.50728433E-02	0.71223855E-01
Speed	0.1220	0.44358373E-02	0.66602051E-01

Vector mean speed 0.0098
 Vector Mean Direction -92.1

Maximum ten values

Eastings					Northings				
----------	--	--	--	--	-----------	--	--	--	--

0.328	0.328	0.318	0.318	0.317	0.207	0.207	0.195	0.194	0.190
0.314	0.312	0.311	0.310	0.305	0.188	0.184	0.183	0.182	0.181

Minimum ten values

Eastings					Northings				
----------	--	--	--	--	-----------	--	--	--	--

-0.290	-0.293	-0.295	-0.297	-0.298	-0.201	-0.202	-0.202	-0.203	-0.203
-0.299	-0.302	-0.309	-0.309	-0.309	-0.204	-0.204	-0.204	-0.204	-0.206

Maximum speeds

0.340	0.338	0.335	0.328	0.328	0.327	0.326	0.326	0.323	0.322
0.319	0.318	0.316	0.316	0.315	0.315	0.315	0.314	0.312	0.312
0.311	0.309	0.307	0.306	0.305	0.304	0.303	0.301	0.299	0.298
0.298	0.297	0.297	0.297	0.296	0.296	0.294	0.294	0.293	0.293
0.292	0.291	0.291	0.289	0.289	0.289	0.288	0.286	0.286	0.285
0.285	0.284	0.283	0.283	0.282	0.281	0.281	0.281	0.280	0.280
0.280	0.279	0.279	0.279	0.277	0.277	0.275	0.275	0.275	0.275
0.275	0.274	0.274	0.274	0.274	0.273	0.273	0.273	0.273	0.272
0.271	0.271	0.270	0.269	0.269	0.269	0.266	0.266	0.266	0.265
0.264	0.264	0.264	0.264	0.263	0.263	0.263	0.262	0.262	0.262

Variance ellipse statistics

Maximum variance 0.1460E-01	Direction	-77.9
Minimum variance 0.4633E-02	Direction	12.1
Total variance 0.1923E-01	Ratio of variances	0.3173E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		24.2
Average direction. maxdir +PI/2 to maxdir -PI/2		180.1

STATISTICS FOR S41264T C59BCSF A

	Mean	Variance	Standard deviation
Eastings	-0.0187	0.32531829E-02	0.57036676E-01
Northings	-0.0034	0.23103377E-02	0.48065975E-01
Speed	0.0680	0.12528945E-02	0.35396248E-01

Vector mean speed 0.0190
 Vector Mean Direction -100.2

Maximum ten values									
Eastings					Northings				
0.118	0.114	0.108	0.100	0.086	0.074	0.067	0.066	0.065	0.059
0.081	0.076	0.068	0.056	0.056	0.057	0.055	0.054	0.053	0.050

Minimum ten values									
Eastings					Northings				
-0.088	-0.099	-0.100	-0.100	-0.101	-0.060	-0.065	-0.077	-0.083	-0.090
-0.106	-0.107	-0.130	-0.134	-0.143	-0.107	-0.126	-0.130	-0.149	-0.150

Maximum speeds									
0.173	0.164	0.161	0.144	0.138	0.135	0.134	0.132	0.121	0.117
0.109	0.108	0.108	0.107	0.107	0.107	0.102	0.100	0.090	0.090
0.087	0.086	0.085	0.084	0.084	0.082	0.082	0.082	0.081	0.081
0.079	0.075	0.075	0.075	0.073	0.071	0.071	0.071	0.070	0.070
0.069	0.069	0.066	0.065	0.063	0.063	0.062	0.061	0.061	0.060
0.059	0.059	0.058	0.058	0.057	0.057	0.056	0.055	0.055	0.055
0.053	0.052	0.052	0.052	0.051	0.050	0.050	0.049	0.048	0.045
0.045	0.044	0.044	0.044	0.044	0.040	0.038	0.036	0.035	0.034
0.033	0.033	0.032	0.030	0.030	0.023	0.022	0.022	0.020	0.020
0.020	0.017	0.016	0.011	0.007					

Variance ellipse statistics

Maximum variance 0.3386E-02	Direction	70.6
Minimum variance 0.2177E-02	Direction	160.6
Total variance 0.5564E-02	Ratio of variances	0.6431E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		-1.7
Average direction. maxdir +PI/2 to maxdir -PI/2		195.2

Meter information details for 1113

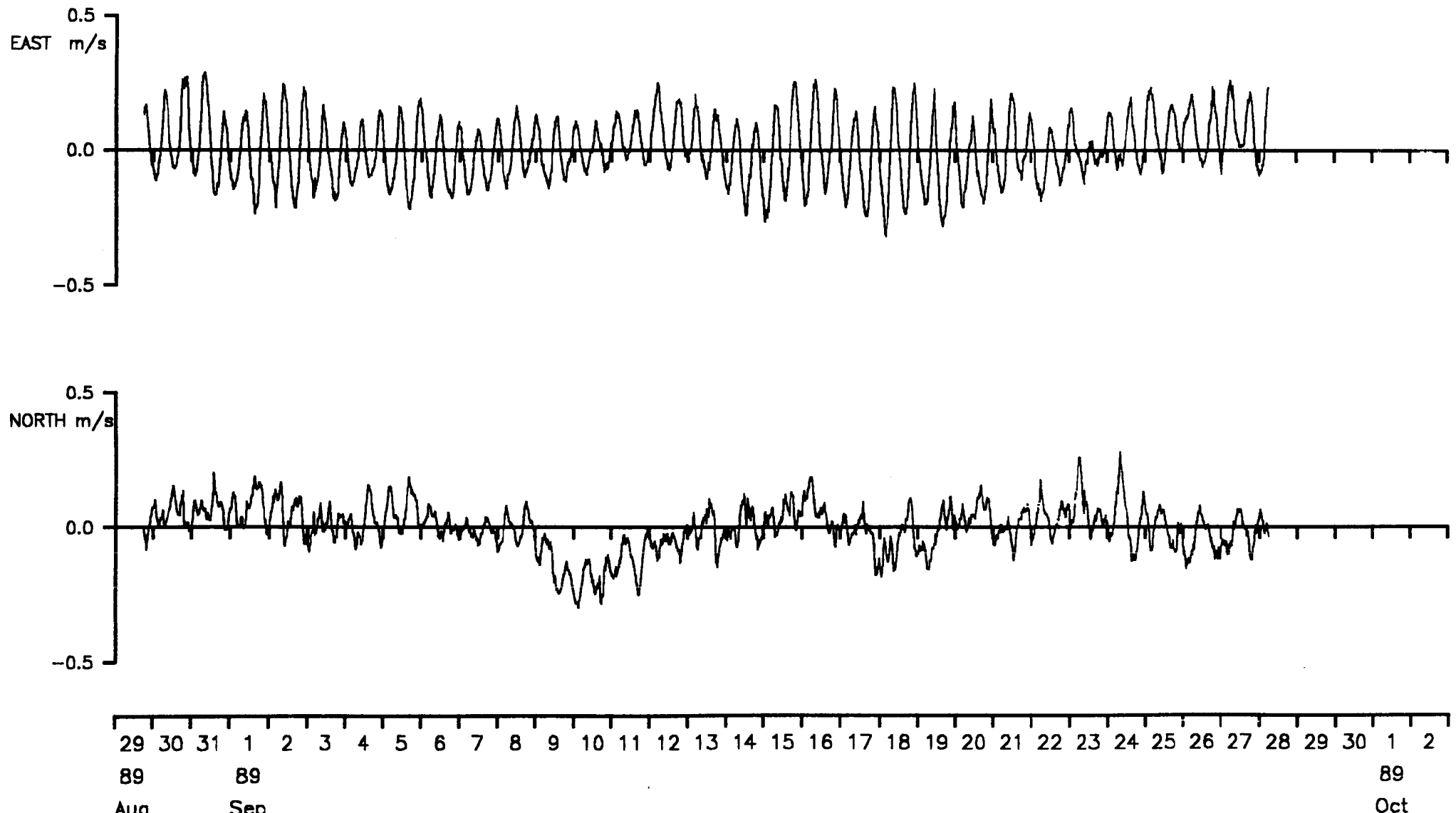
Rig No	:	C59BC
Meter No	:	1113
Recording interval	:	600.0 seconds
Meter height from bottom	:	27.0 m
Position of meter on rig	:	MT
Meter type	:	S4
Meter started	:	29-AUG-89 17:40:00
Meter stopped	:	28-SEPT-89 08:00:00
Period switched on	:	29.6 days
Period of good data	:	29.5 days
Total number of scans	:	4249
Timing error	:	None
Comments	:	Good record obtained

VELOCITY COMPONENT TIME SERIES PLOT

Meter no. 1113 Rig no. C59BC Depth of water(m) 52.0

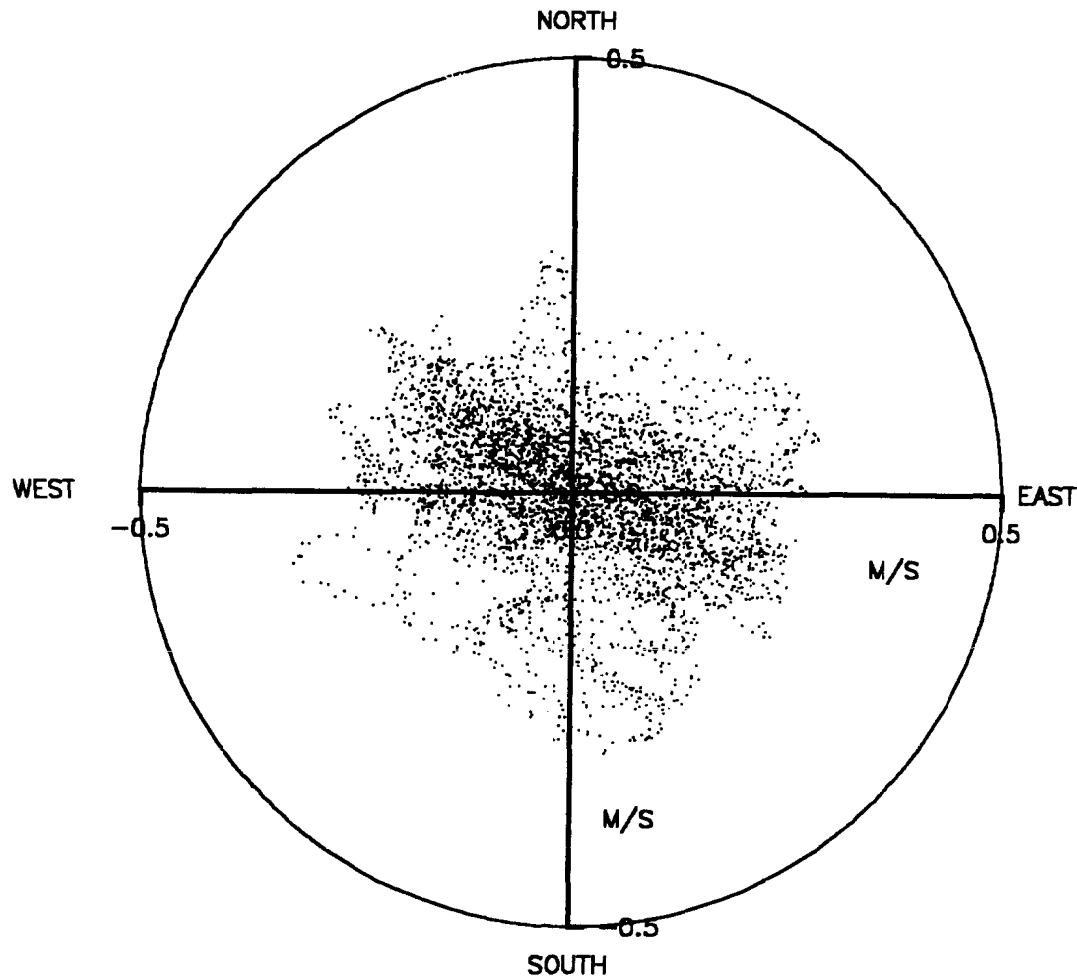
Start/End 1989/08/29 AT 18:01:00 1989/09/28 AT 06:20:00

Position 55 30.03N 05 30.60E Meter Height(m) 27.0



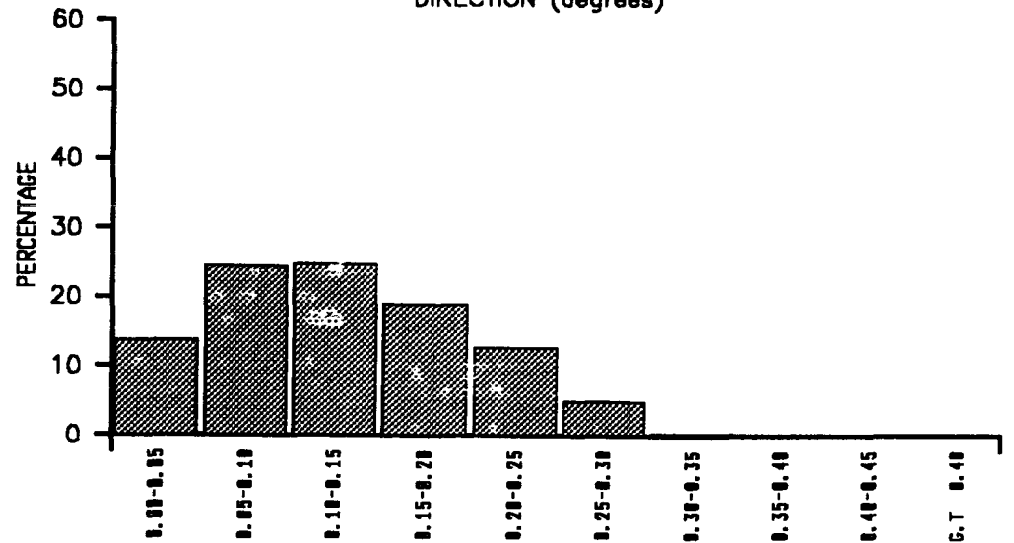
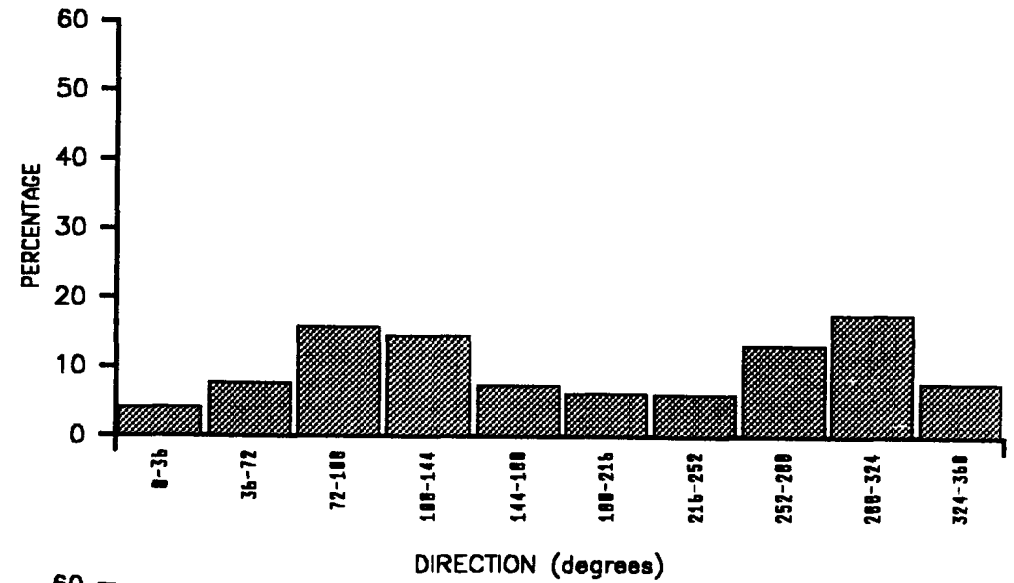
SCATTER PLOT

Meter no. 1113 Rig no. C59BC Depth of water(m) 52.0
 Start/End 1989/08/29 AT 18:01:00 1989/09/28 AT 06:20:00
 Position 55 30.03N 05 30.60E Meter Height(m) 27.0



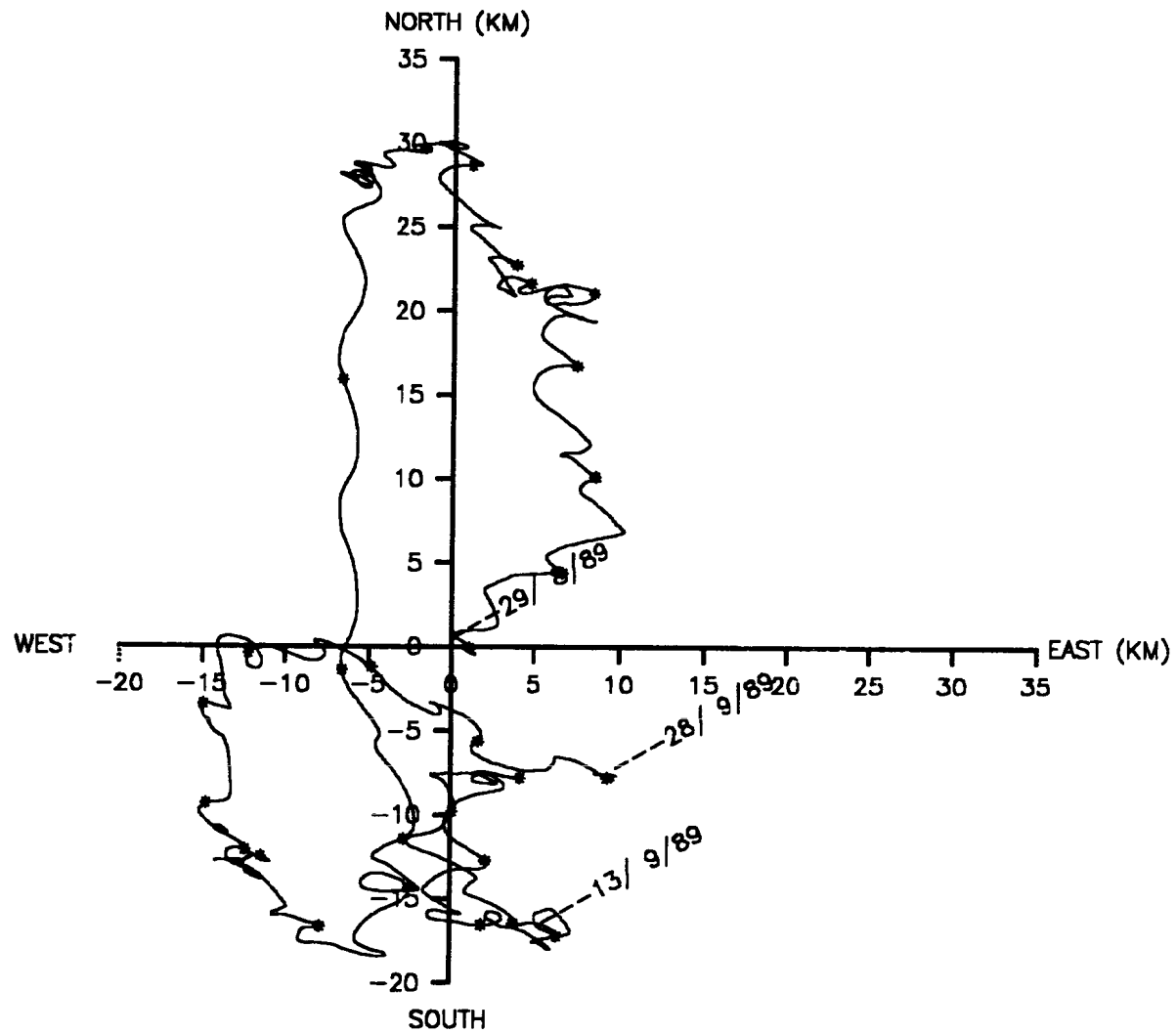
HISTOGRAMS FOR SPEEDS AND DIRECTIONS

Meter no. 1113 Rig no. C59BC Depth of water(m) 52.0
 Start/End 1989/08/29 AT 18:01:00 1989/09/28 AT 06:20:00
 Position 55 30.03N 05 30.60E Meter Height(m) 27.0



VECTOR PLOT

Meter no. 1113 Rig no. C59BC Depth of water(m) 52.0
Start/End 1989/08/29 AT 18:01:00 1989/09/28 AT 06:20:00
Position 55 30.03N 05 30.60E Meter Height(m) 27.0



STATISTICS FOR S41113MT C59BCS A

	Mean	Variance	Standard deviation
Eastings	0.0039	0.13852298E-01	0.11769575E+00
Northings	-0.0030	0.74767359E-02	0.86468101E-01
Speed	0.1288	0.47498941E-02	0.68919420E-01

Vector mean speed 0.0049
Vector Mean Direction 127.7

Maximum ten values

Eastings	Northings
----------	-----------

0.285	0.285	0.281	0.279	0.279	0.277	0.270	0.264	0.259	0.259
0.277	0.272	0.271	0.270	0.269	0.259	0.255	0.255	0.254	0.254

Minimum ten values

Eastings	Northings
----------	-----------

-0.283	-0.283	-0.291	-0.294	-0.305	-0.282	-0.284	-0.284	-0.285	-0.285
-0.311	-0.313	-0.315	-0.317	-0.322	-0.285	-0.285	-0.288	-0.296	-0.300

Maximum speeds

0.333	0.329	0.326	0.324	0.319	0.311	0.310	0.303	0.303	0.301
0.300	0.299	0.298	0.298	0.297	0.297	0.296	0.295	0.295	0.295
0.294	0.293	0.292	0.292	0.292	0.292	0.292	0.291	0.291	0.291
0.290	0.290	0.289	0.289	0.289	0.289	0.289	0.288	0.287	0.286
0.286	0.285	0.285	0.285	0.285	0.285	0.284	0.284	0.283	0.283
0.282	0.281	0.280	0.280	0.279	0.279	0.279	0.279	0.279	0.278
0.278	0.278	0.278	0.277	0.277	0.276	0.276	0.276	0.276	0.276
0.276	0.275	0.275	0.275	0.275	0.274	0.274	0.273	0.272	0.272
0.272	0.271	0.271	0.270	0.270	0.270	0.270	0.270	0.270	0.270
0.269	0.269	0.269	0.268	0.268	0.268	0.268	0.268	0.267	0.267

Variance ellipse statistics

Maximum variance 0.1498E-01	Direction	-68.8
Minimum variance 0.6348E-02	Direction	21.2
Total variance 0.2133E-01	Ratio of variances	0.4237E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		20.7
Average direction. maxdir +PI/2 to maxdir -PI/2		179.2

STATISTICS FOR S41113MT C59BCSF A

	Mean	Variance	Standard deviation
Eastings	-0.0074	0.13641880E-02	0.36934916E-01
Northings	-0.0069	0.48118792E-02	0.69367707E-01
Speed	0.0654	0.19586135E-02	0.44256229E-01

Vector mean speed 0.0101
 Vector Mean Direction -133.3

Maximum ten values									
Eastings					Northings				
0.075	0.069	0.067	0.067	0.066	0.086	0.084	0.082	0.080	0.075
0.063	0.060	0.056	0.054	0.048	0.072	0.072	0.072	0.067	0.067

Minimum ten values									
Eastings					Northings				
-0.056	-0.056	-0.062	-0.062	-0.064	-0.098	-0.114	-0.133	-0.142	-0.156
-0.066	-0.068	-0.068	-0.069	-0.075	-0.182	-0.187	-0.205	-0.214	-0.218

Maximum speeds									
0.218	0.214	0.205	0.188	0.182	0.158	0.142	0.138	0.123	0.113
0.106	0.098	0.093	0.092	0.090	0.089	0.087	0.087	0.087	0.087
0.083	0.083	0.082	0.077	0.077	0.076	0.076	0.075	0.075	0.073
0.072	0.071	0.070	0.070	0.070	0.069	0.069	0.067	0.067	0.067
0.065	0.064	0.064	0.063	0.061	0.060	0.059	0.059	0.058	0.057
0.057	0.056	0.054	0.053	0.053	0.053	0.053	0.052	0.050	0.050
0.049	0.048	0.048	0.047	0.046	0.044	0.041	0.041	0.040	0.040
0.040	0.039	0.038	0.038	0.036	0.032	0.032	0.032	0.030	0.026
0.026	0.025	0.025	0.022	0.021	0.015	0.015	0.013	0.013	0.010
0.009	0.008	0.007	0.005	0.004					

Variance ellipse statistics

Maximum variance 0.4840E-02	Direction	-5.1
Minimum variance 0.1336E-02	Direction	84.9
Total variance 0.6176E-02	Ratio of variances	0.2760E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		-15.7
Average direction. maxdir +PI/2 to maxdir -PI/2		185.5

Meter information details for 1118

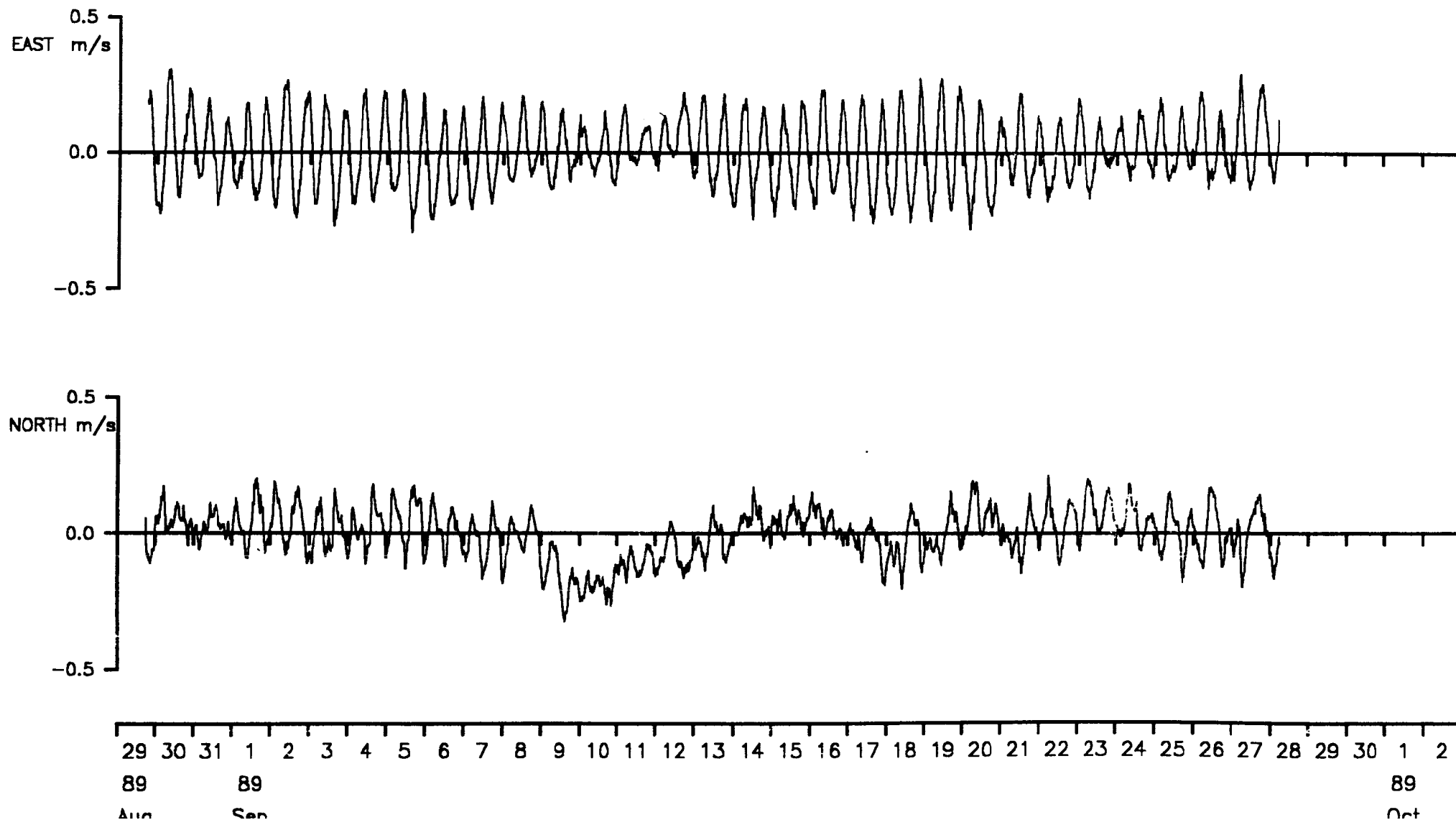
Rig No	:	C59BC
Meter No	:	1118
Recording interval	:	600.0 seconds
Meter height from bottom	:	15.0 m
Position of meter on rig	:	MB
Meter type	:	S4
Meter started	:	29-AUG-89 16:14:00
Meter stopped	:	28-SEPT-89 08:15:00
Period switched on	:	29.7 days
Period of good data	:	29.5 days
Total number of scans	:	4250
Timing error	:	60 seconds slow
Comments	:	Hourly time stamp has jumped by one minute at: (1) 05-SEPT-89 14:14 to 15:15

VELOCITY COMPONENT TIME SERIES PLOT

Meter no. 1118 Rig no. C59BC Depth of water(m) 52.0

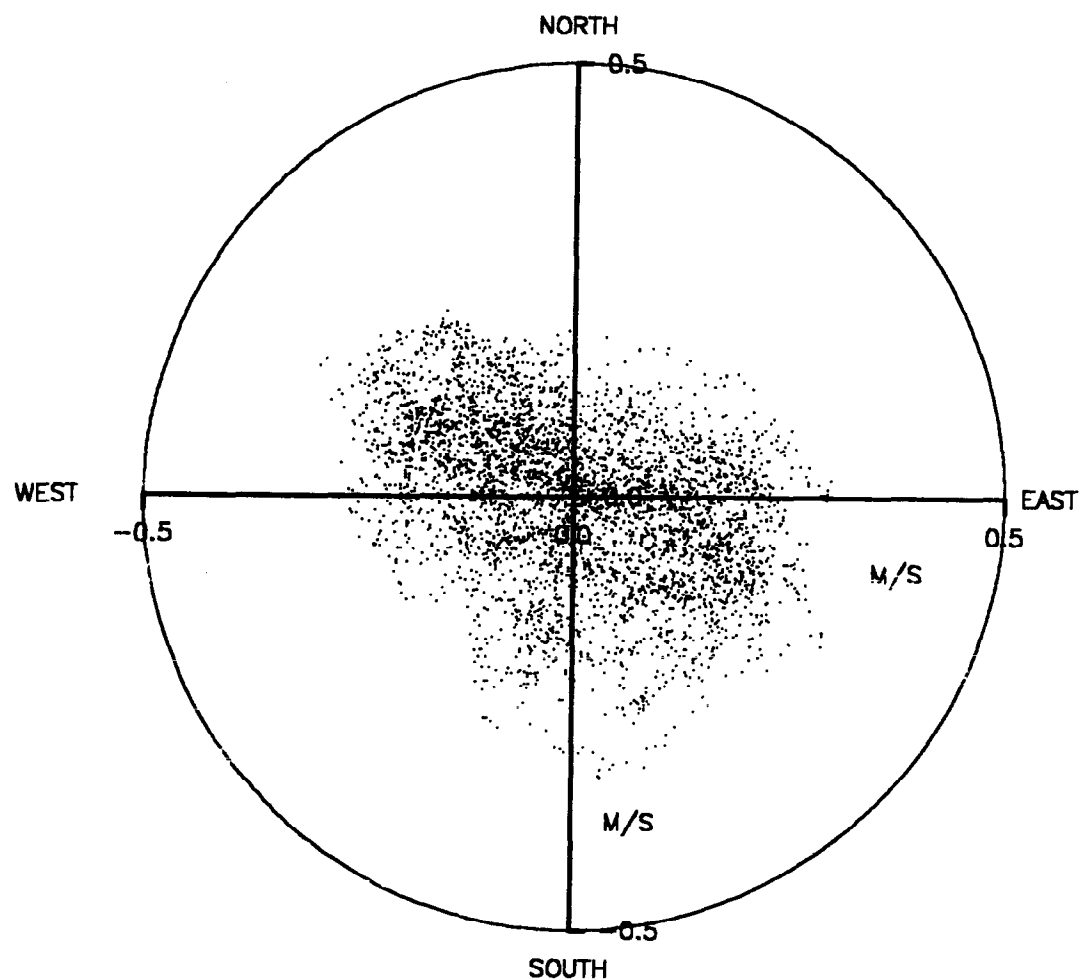
Start/End 1989/08/29 AT 18:01:00 1989/09/28 AT 06:20:00

Position 55 30.03N 05 30.60E Meter Height(m) 15.0



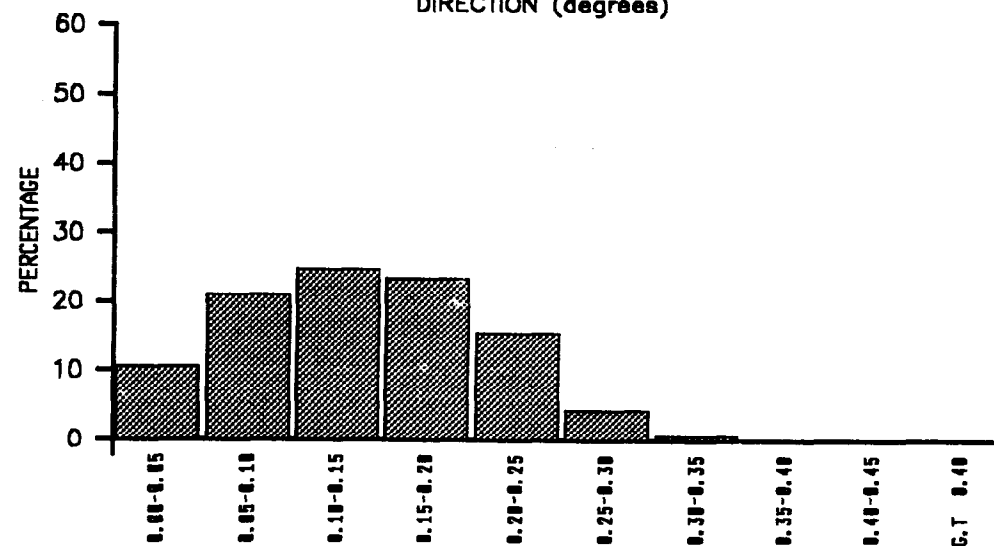
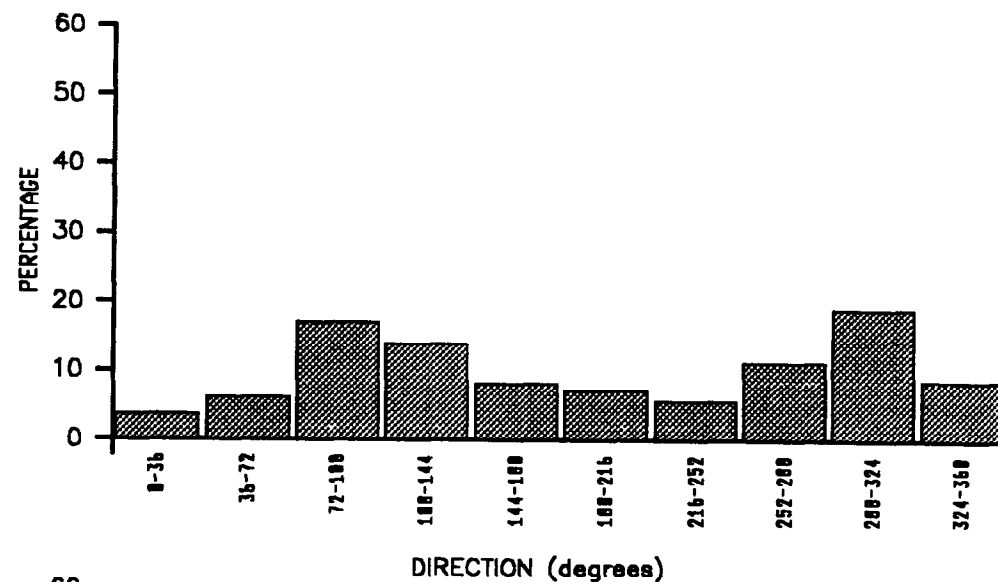
SCATTER PLOT

Meter no. 1118 Rig no. C59BC Depth of water(m) 52.0
 Start/End 1989/08/29 AT 18:01:00 1989/09/28 AT 06:20:00
 Position 55 30.03N 05 30.60E Meter Height(m) 15.0



HISTOGRAMS FOR SPEEDS AND DIRECTIONS

Meter no. 1118 Rig no. C59BC Depth of water(m) 52.0
 Start/End 1989/08/29 AT 18:01:00 1989/09/28 AT 06:20:00
 Position 55 30.03N 05 30.60E Meter Height(m) 15.0

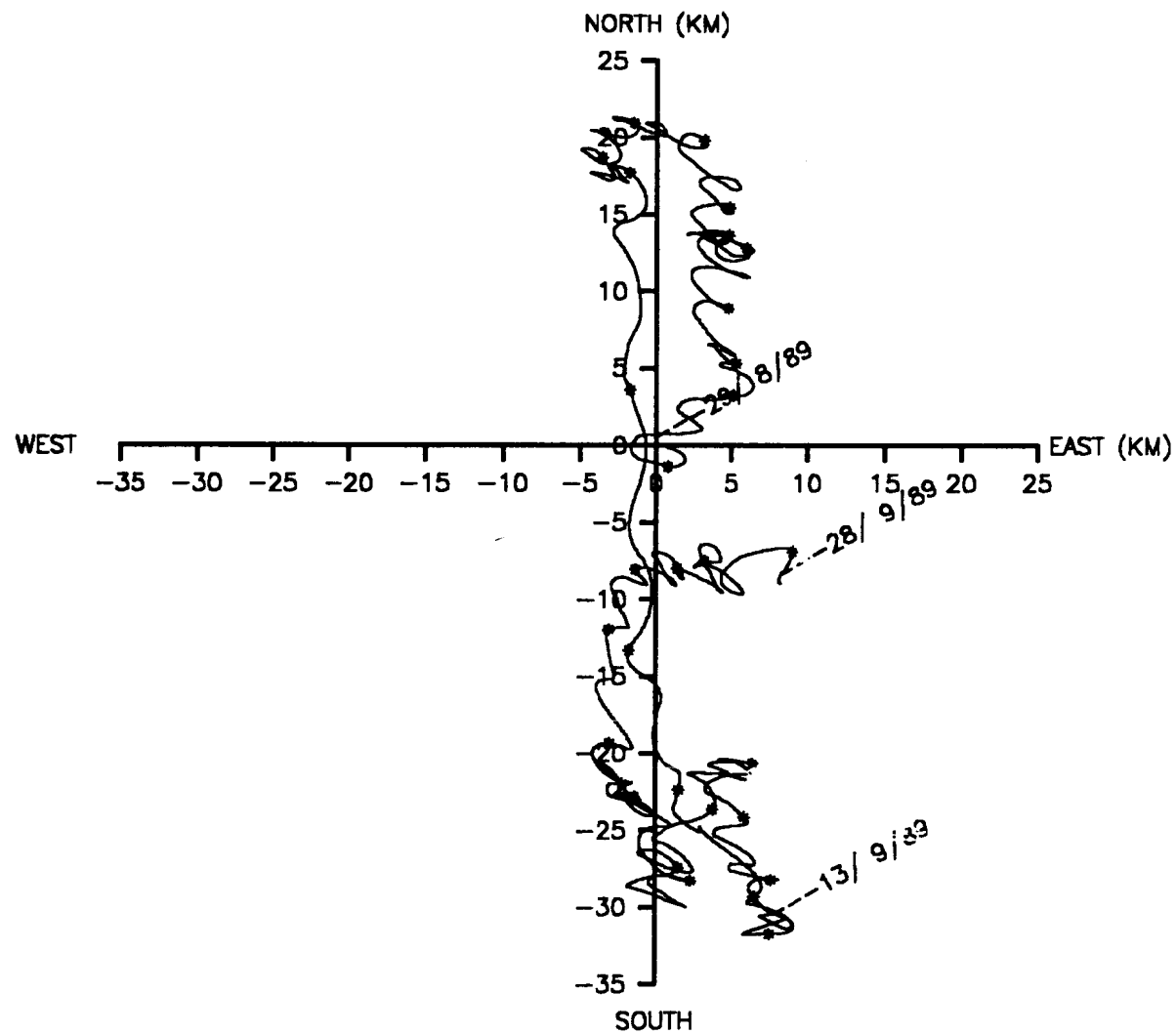


VECTOR PLOT

Meter no. 1118 Rig no. C59BC Depth of water(m) 52.0

Start/End 1989/08/29 AT 18:01:00 1989/09/28 AT 06:20:00

Position 55 30.03N 05 30.60E Meter Height(m) 15.0



STATISTICS FOR S41118MB C59BCS A

	Mean	Variance	Standard deviation
Eastings	0.0032	0.15438825E-01	0.12425303E+00
Northings	-0.0035	0.84080696E-02	0.91695487E-01
Speed	0.1388	0.45997873E-02	0.67821741E-01

Vector mean speed 0.0048
 Vector Mean Direction 137.4

Maximum ten values									
Eastings					Northings				
0.304	0.299	0.298	0.296	0.296	0.213	0.203	0.200	0.199	0.197
0.295	0.294	0.292	0.290	0.290	0.196	0.196	0.195	0.195	0.194

Minimum ten values									
Eastings					Northings				
-0.261	-0.262	-0.267	-0.270	-0.270	-0.295	-0.296	-0.303	-0.307	-0.310
-0.272	-0.274	-0.282	-0.288	-0.296	-0.312	-0.314	-0.315	-0.323	-0.325

Maximum speeds									
0.336	0.331	0.331	0.329	0.329	0.326	0.324	0.324	0.320	0.317
0.317	0.314	0.314	0.307	0.306	0.305	0.304	0.304	0.304	0.303
0.303	0.303	0.303	0.301	0.300	0.300	0.298	0.297	0.296	0.296
0.296	0.296	0.296	0.295	0.295	0.294	0.294	0.292	0.291	0.291
0.290	0.290	0.290	0.290	0.289	0.289	0.289	0.288	0.287	0.286
0.286	0.286	0.286	0.286	0.285	0.285	0.284	0.284	0.283	0.282
0.282	0.281	0.281	0.281	0.281	0.281	0.280	0.280	0.279	0.279
0.279	0.278	0.277	0.277	0.277	0.276	0.276	0.276	0.275	0.275
0.275	0.274	0.274	0.274	0.274	0.274	0.273	0.273	0.273	0.273
0.273	0.272	0.272	0.272	0.272	0.271	0.271	0.271	0.271	0.271

Variance ellipse statistics

Maximum variance 0.1752E-01	Direction	-64.5
Minimum variance 0.6331E-02	Direction	25.5
Total variance 0.2385E-01	Ratio of variances	0.3614E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		17.3
Average direction. maxdir +PI/2 to maxdir -PI/2		180.8

STATISTICS FOR S41118MB C59BCSF A

	Mean	Variance	Standard deviation
Eastings	-0.0016	0.66305650E-03	0.25749881E-01
Northings	-0.0076	0.49238354E-02	0.70170045E-01
Speed	0.0599	0.20182647E-02	0.44925097E-01

Vector mean speed 0.0078
Vector Mean Direction -167.9

Maximum ten values									
Eastings					Northings				
0.068	0.066	0.056	0.054	0.041	0.089	0.088	0.079	0.079	0.079
0.033	0.030	0.030	0.030	0.030	0.078	0.065	0.064	0.062	0.061

Minimum ten values									
Eastings					Northings				
-0.038	-0.039	-0.040	-0.042	-0.044	-0.107	-0.110	-0.129	-0.153	-0.160
-0.046	-0.047	-0.054	-0.055	-0.059	-0.176	-0.196	-0.197	-0.211	-0.213

Maximum speeds									
0.213	0.211	0.197	0.197	0.176	0.160	0.153	0.130	0.110	0.109
0.099	0.099	0.094	0.092	0.089	0.088	0.088	0.088	0.087	0.085
0.079	0.079	0.079	0.075	0.072	0.069	0.066	0.066	0.065	0.064
0.064	0.064	0.063	0.063	0.062	0.060	0.059	0.059	0.058	0.057
0.057	0.056	0.056	0.055	0.054	0.053	0.051	0.051	0.049	0.047
0.047	0.046	0.046	0.044	0.044	0.044	0.043	0.043	0.042	0.042
0.042	0.041	0.035	0.035	0.034	0.034	0.034	0.033	0.033	0.031
0.030	0.030	0.029	0.029	0.026	0.025	0.025	0.025	0.024	0.023
0.021	0.021	0.021	0.020	0.019	0.018	0.018	0.017	0.015	0.013
0.011	0.006	0.005	0.005	0.005					

Variance ellipse statistics

Maximum variance 0.4974E-02	Direction	-6.1
Minimum variance 0.6133E-03	Direction	83.9
Total variance 0.5587E-02	Ratio of variances	0.1233E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		-4.7
Average direction. maxdir +PI/2 to maxdir -PI/2		181.2

Meter information details for 9347

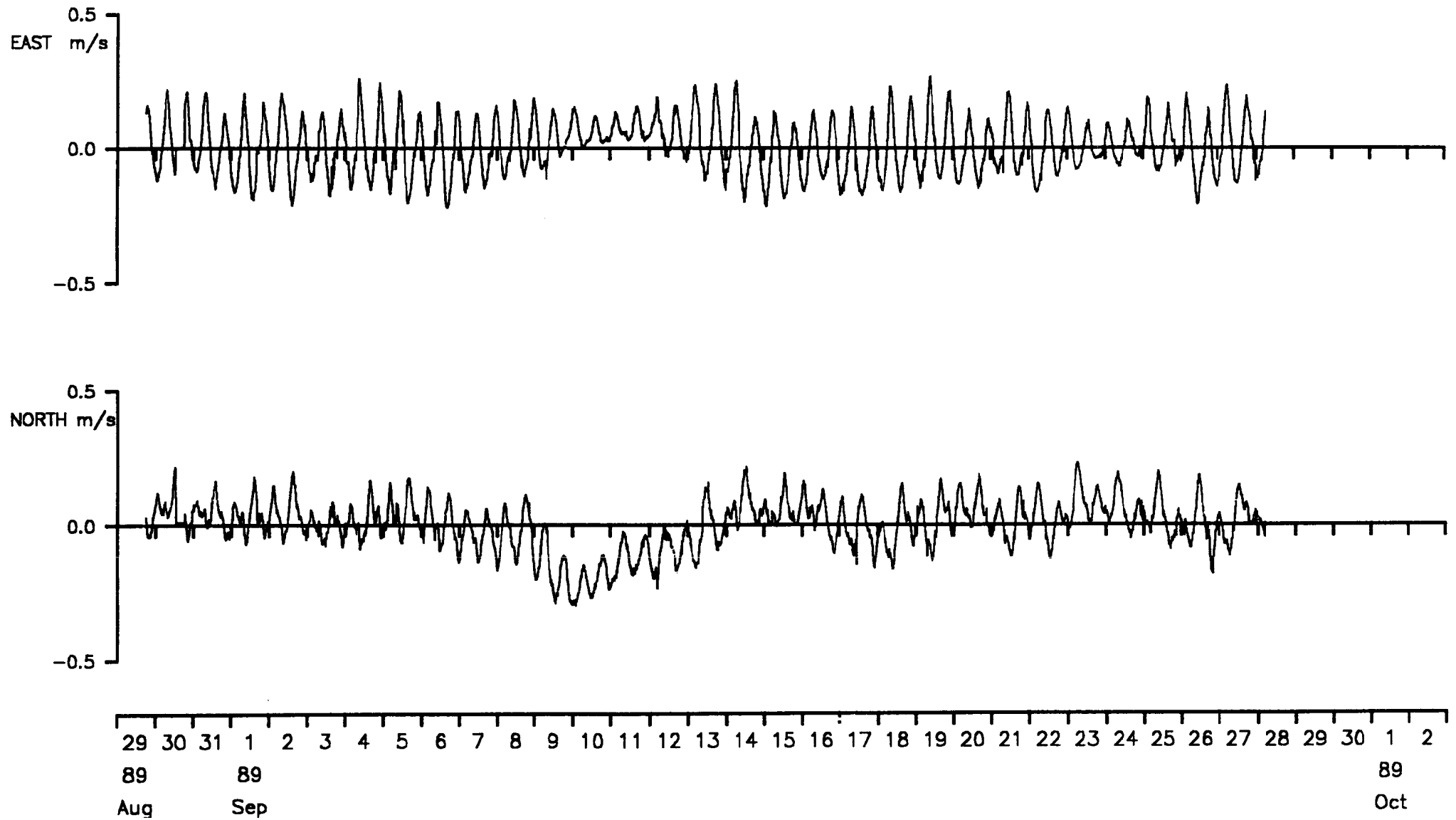
Rig No	:	C59BC
Meter No	:	9347
Recording interval	:	600.0 seconds
Meter height from bottom	:	7.0 m
Position of meter on rig	:	B
Meter type	:	AS
Meter started	:	29-AUG-89 16:39:00
Meter stopped	:	29-SEPT-89 07:59:00
Period switched on	:	30.6 days
Period of good data	:	29.5 days
Total number of scans	:	4250
Timing error	:	None
Comments	:	Good record obtained

VELOCITY COMPONENT TIME SERIES PLOT

Meter no. 9347 Rig no. C59BC Depth of water(m) 52.0

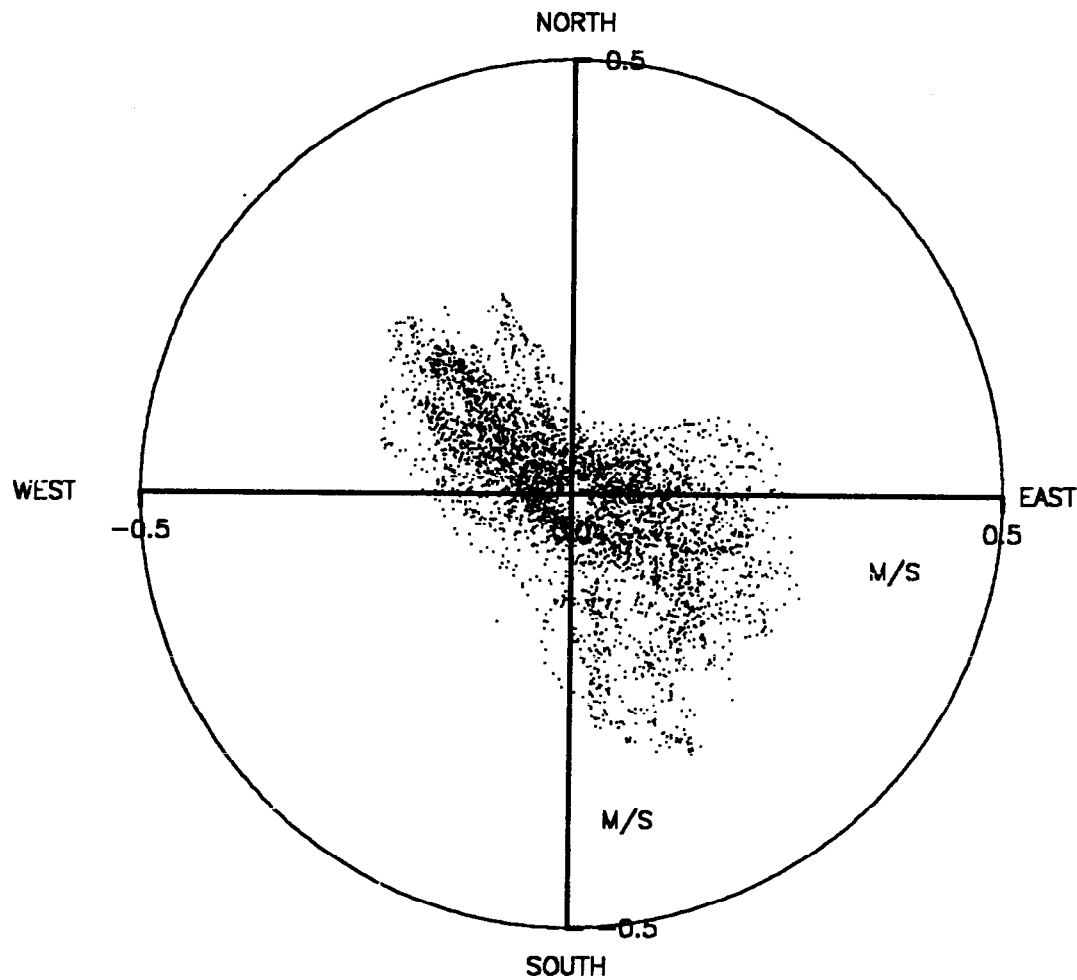
Start/End 1989/08/29 AT 18:01:00 1989/09/28 AT 06:20:00

Position 55 30.03N 05 30.60E Meter Height(m) 7.0



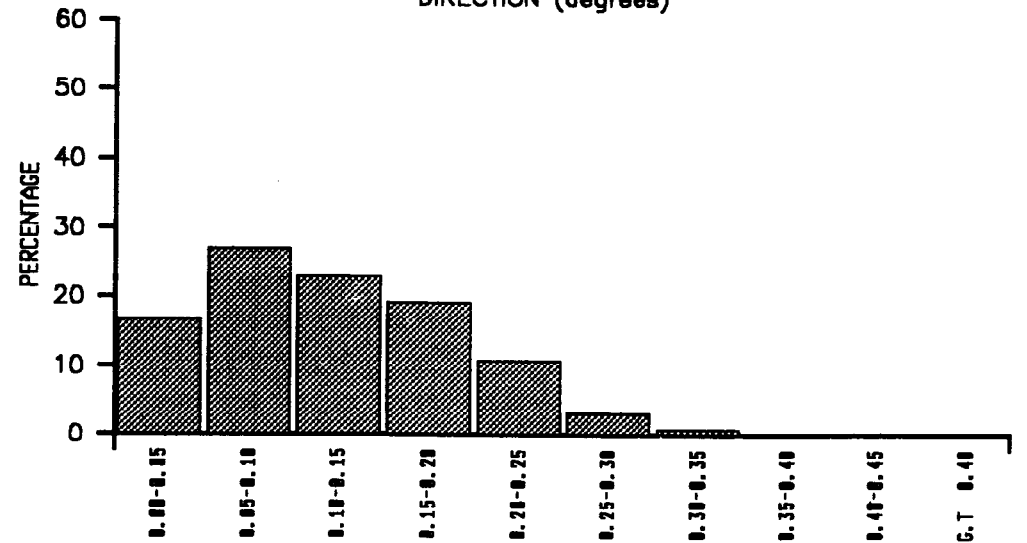
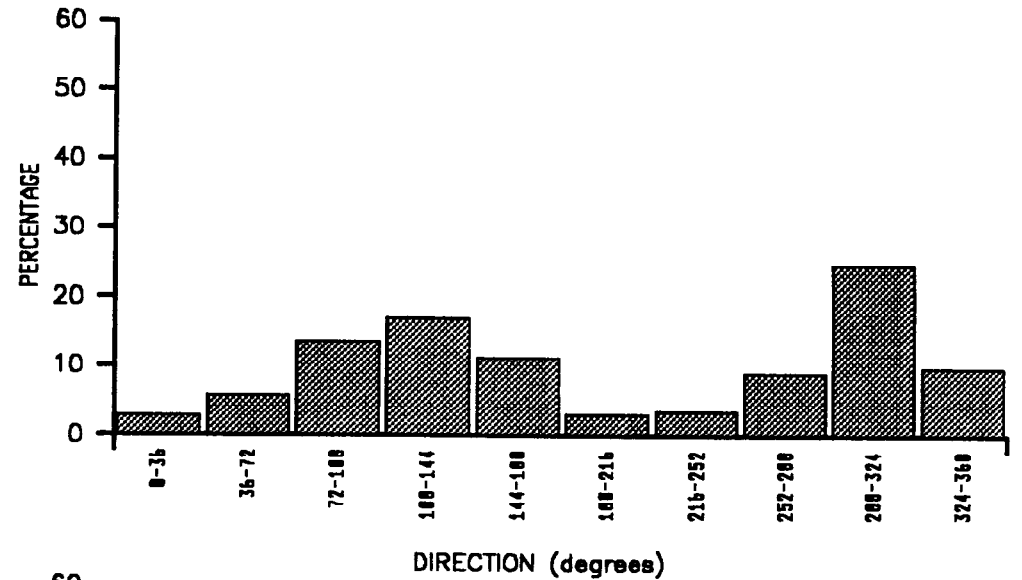
SCATTER PLOT

Meter no. 9347 Rig no. C59BC Depth of water(m) 52.0
 Start/End 1989/08/29 AT 18:01:00 1989/09/28 AT 06:20:00
 Position 55 30.03N 05 30.60E Meter Height(m) 7.0



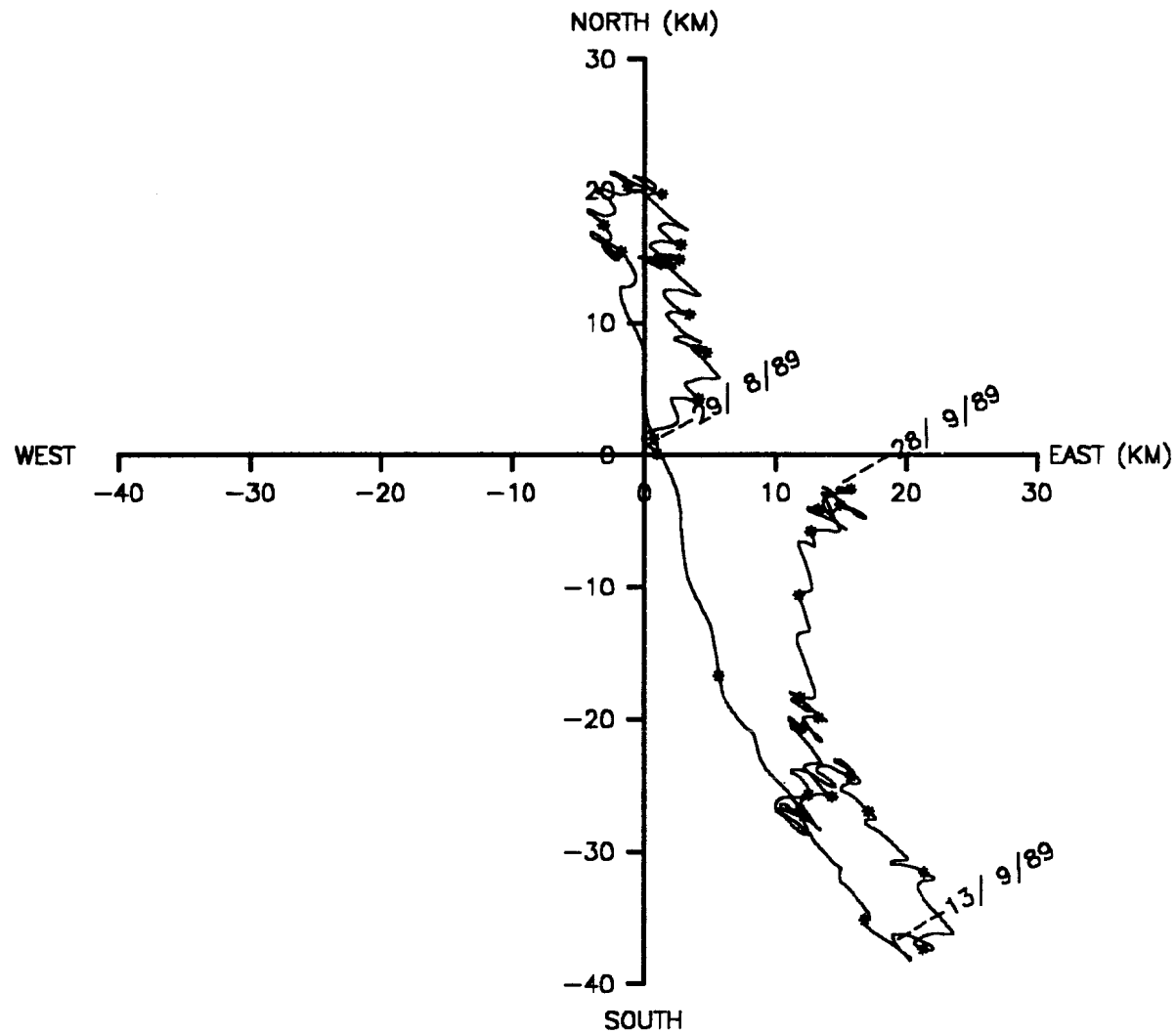
HISTOGRAMS FOR SPEEDS AND DIRECTIONS

Meter no. 9347 Rig no. C59BC Depth of water(m) 52.0
 Start/End 1989/08/29 AT 18:01:00 1989/09/28 AT 06:20:00
 Position 55 30.03N 05 30.60E Meter Height(m) 7.0



VECTOR PLOT

Meter no. 9347 Rig no. C59BC Depth of water(m) 52.0
Start/End 1989/08/29 AT 18:01:00 1989/09/28 AT 06:20:00
Position 55 30.03N 05 30.60E Meter Height(m) 7.0

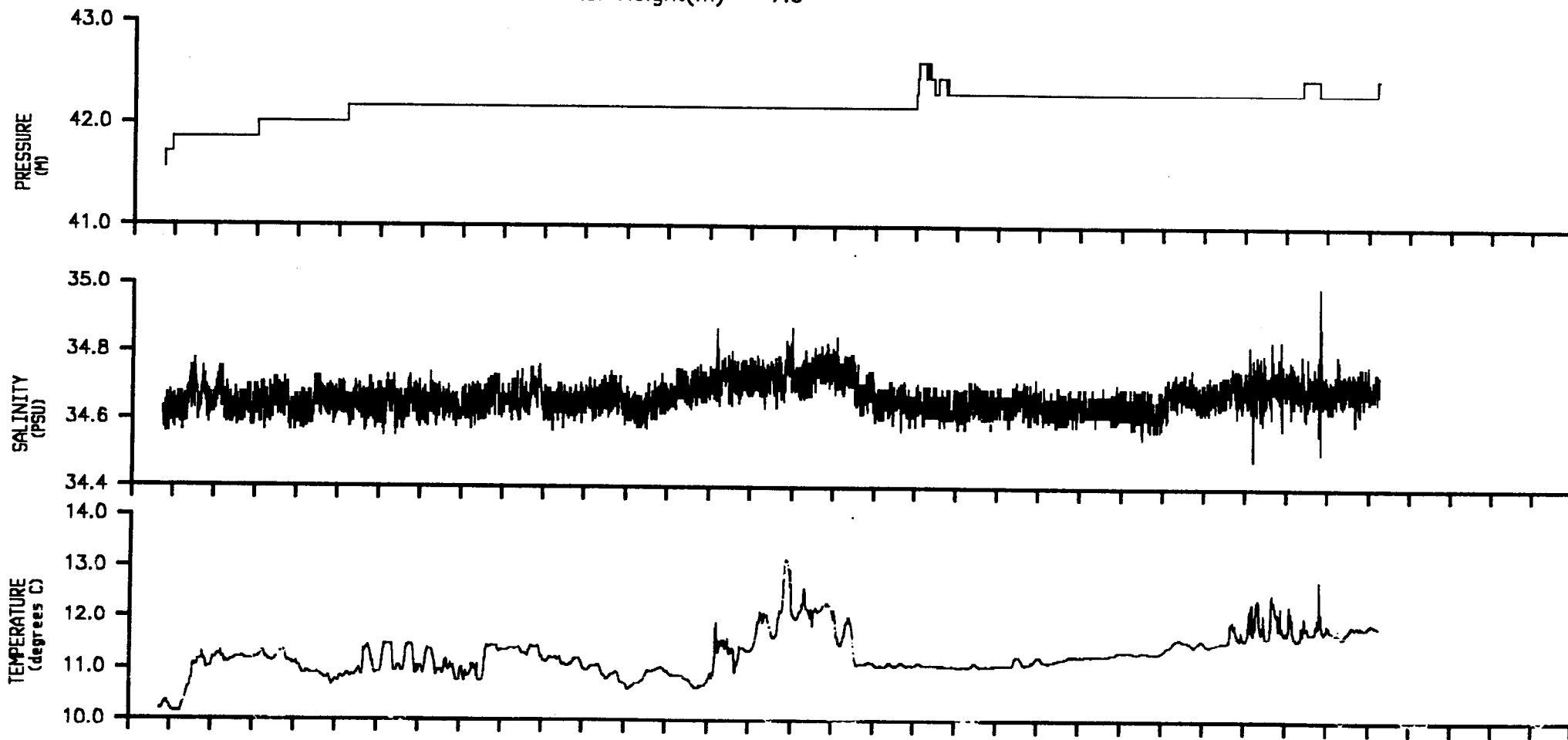


TEMPERATURE, SALINITY AND PRESSURE TIME SERIES PLOTS

Meter no. 9347 Rig no. C59BC Depth of water(m) 52.0

Start/End 1989/08/29 AT 18:01:00 1989/09/28 AT 06:20:00

Position 55 30.03N 05 30.60E Meter Height(m) 7.0



29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 1 2
89 89 89
Aug Sep Oct

STATISTICS FOR AS9347B C59BCS A

	Mean	Variance	Standard deviation
Eastings	0.0060	0.10479100E-01	0.10236746E+00
Northings	-0.0010	0.88079534E-02	0.93850672E-01
Speed	0.1214	0.45820400E-02	0.67690790E-01

Vector mean speed 0.0061
Vector Mean Direction 99.7

Maximum ten values									
Eastings					Northings				
0.264	0.261	0.255	0.253	0.253	0.229	0.226	0.224	0.223	0.223
0.253	0.250	0.249	0.248	0.248	0.221	0.220	0.217	0.216	0.215

Minimum ten values									
Eastings					Northings				
-0.216	-0.217	-0.217	-0.217	-0.217	-0.288	-0.289	-0.290	-0.291	-0.292
-0.218	-0.220	-0.221	-0.221	-0.222	-0.294	-0.295	-0.297	-0.297	-0.299

Maximum speeds									
0.331	0.328	0.328	0.328	0.325	0.325	0.319	0.319	0.316	0.313
0.313	0.313	0.313	0.313	0.313	0.310	0.310	0.310	0.307	0.307
0.307	0.307	0.305	0.302	0.302	0.302	0.302	0.302	0.299	0.296
0.296	0.296	0.296	0.293	0.293	0.293	0.290	0.290	0.290	0.290
0.284	0.284	0.284	0.284	0.281	0.281	0.281	0.281	0.281	0.281
0.278	0.278	0.278	0.278	0.278	0.278	0.278	0.278	0.278	0.275
0.275	0.275	0.275	0.275	0.275	0.275	0.275	0.273	0.273	0.273
0.273	0.273	0.273	0.273	0.270	0.270	0.270	0.270	0.270	0.270
0.270	0.270	0.270	0.270	0.270	0.270	0.270	0.270	0.267	0.267
0.267	0.267	0.267	0.267	0.267	0.267	0.267	0.267	0.264	0.264

Variance ellipse statistics

Maximum variance 0.1563E-01	Direction	-49.0
Minimum variance 0.3659E-02	Direction	41.0
Total variance 0.1929E-01	Ratio of variances	0.2342E+00
Average direction. maxdir -PI/2 to maxdir +PI/2		5.7
Average direction. maxdir +PI/2 to maxdir -PI/2		170.9

STATISTICS FOR AS9347B C59BCSF A

	Mean	Variance	Standard deviation
Eastings	0.0056	0.10457546E-02	0.32338131E-01
Northings	-0.0069	0.55181272E-02	0.74284077E-01
Speed	0.0634	0.25800108E-02	0.50793808E-01

Vector mean speed 0.0089
 Vector Mean Direction 141.0

Maximum ten values									
Eastings					Northings				
0.077	0.075	0.073	0.069	0.067	0.095	0.092	0.084	0.075	0.068
0.062	0.061	0.058	0.057	0.056	0.068	0.066	0.066	0.065	0.064

Minimum ten values									
Eastings					Northings				
-0.033	-0.034	-0.035	-0.037	-0.038	-0.110	-0.117	-0.133	-0.157	-0.161
-0.041	-0.046	-0.046	-0.054	-0.055	-0.187	-0.206	-0.216	-0.232	-0.233

Maximum speeds									
0.240	0.237	0.223	0.211	0.196	0.169	0.165	0.149	0.139	0.134
0.131	0.125	0.115	0.111	0.101	0.095	0.092	0.084	0.084	0.081
0.080	0.078	0.076	0.076	0.072	0.071	0.069	0.069	0.068	0.067
0.066	0.065	0.058	0.057	0.056	0.055	0.053	0.052	0.052	0.052
0.052	0.051	0.050	0.049	0.049	0.049	0.049	0.049	0.048	0.047
0.047	0.047	0.045	0.044	0.044	0.044	0.043	0.042	0.041	0.040
0.039	0.039	0.039	0.038	0.038	0.038	0.037	0.036	0.036	0.035
0.035	0.032	0.032	0.029	0.029	0.028	0.028	0.027	0.025	0.024
0.024	0.024	0.023	0.023	0.022	0.019	0.017	0.017	0.015	0.014
0.014	0.014	0.012	0.011	0.004					

Variance ellipse statistics

Maximum variance 0.5984E-02	Direction	-17.1
Minimum variance 0.5798E-03	Direction	72.9
Total variance 0.6564E-02	Ratio of variances	0.9688E-01
Average direction. maxdir -PI/2 to maxdir +PI/2		13.3
Average direction. maxdir +PI/2 to maxdir -PI/2		185.6

STICK TIME SERIES PLOT

Rig no. C59BC Depth of water(m) 52.0

Start/End 1989/08/29 AT 18:01:00 1989/09/28 AT 06:20:00

Position 55 30.03N 05 30.60E

Filtered Series Scale 0.1 m/s

Meter No. Meter Height

9347 7.0 M

1118 15.0 M

1113 27.0 M

1264 37.0 M

